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British Museum (Nat. Hist). Dept. of Entomology.

CATALOGUE

OF

HYMENOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

by Frederick Smith. J

PART I.

ANDRENIDÆ AND APIDÆ.

LONDON:
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PREFACE.

THE principal object of the present Catalogue has been to give a complete list of all the known species of ANDRENIDÆ and APIDÆ, at the same time indicating those at present contained in the Collection of the British Museum.

This part of the Catalogue has been prepared by Mr. FREDERICK SMITH, who has taken every care in the determination of the species, the references to the synonyma, and in the descriptions of such species as hitherto are apparently undescribed.

The remaining Parts will follow as soon as they can be completed.

JOHN EDWARD GRAY.

24th May, 1853.

CATALOGUE

OF

HYMENOPTERA.

Order HYMENOPTERA.

Tribe 4. ANTHOPHILA.

Anthophila, *Latr. Reg. Anim.* iii. 511, 1817.

Fam. 1. ANDRENIDÆ.

Andrenetæ, *Latr. Hist. Nat. Ins.* xiii. 355, 1805.
Andrenides, *Leach, Edinb. Enc.* 1812.
Andrenidæ, *Leach, Sam. Comp.* 1819.
Andrenites, *Newm. Ent. Mag.* 1834.
Melitta, *Kirby, Mon. Ap. Angl.* i. 127, 1802.
Brachyglossa, Prosopidæ et Andrenidæ, *Kirby, Faun. Bor. Amer.* p. 266, 267, 1837.

Subfam. 1. OBTUSILINGUES.

Obtusilingues, *Westw. Int. Class. Ins. Gen. Syn.* p. 84.

Genus 1. COLLETES.

Apis, pt., *Linn. Syst. Nat.* i. 953, 1766.
Andrena, pt., *Fab. Ent. Syst.* ii. 307, 1793.
Megilla, pt., *Fab. Syst. Piez.* p. 328.
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 130, * *a*, 1802.
Colletes, *Latr. Hist. Nat. Ins.* xiii. 359, 1805.
Evodia, *Panz. Krit. Revis.* p. 208, 1806.
(Plate I. Details.)

1. Colletes succincta. B.M.

Apis succincta, *Linn. Syst. Nat.* i. 955. 18, & *Cab. Mus. Linn. Soc.* ♀.
Christ. Hym. p. 185. t. 15. f. 7?
Andrena succincta, *Fab. Syst. Ent.* p. 378. 14, ♀.
Rossi, Faun. Etrus. ii. 98. 899.
Apicis invictus, *Harris, Expos.* p. 134. 12. t. 39. f. 12, ♀.
Apis calendarum, *Panz. Faun. Germ.* lxxxiii. 19, ♂?
Melitta succincta, *Kirby, Mon. Ap. Angl.* ii. 32. 1, ♂, ♀.
Hylaeus glutinosus, *Latr. Cuv. Reg. An.* i. ed. 3. 513, ♀.
Megilla calendarum, *Fab. Syst. Piez.* p. 335. 33, ♂.
Colletes succinctus, *Smith, Zool.* iv. 1276. 1.
Evodia calendarum, *Panz. Krit. Revis.* p. 208.
Spin. Ins. Lig. ii. 197. 1.
Latr. Gen. Cr. Ins. i. t. 14. f. 7.
Panz. Faun. Germ. 21 ♂, 22 ♀.
St. Farg. Hym. ii. 298. 3.
Nyland. Act. Soc. Sc. Fenn. p. 206. 2.
Colletes fodiens, *Curt. Brit. Ent.* ii. f. 85, ♀.
Reaum. Mem. vi. t. 12. f. 1, 13.

Hab. England; France; Germany; Sweden; Finland.

2. Colletes fodiens. B.M.

Melitta fodiens, *Kirby, Mon. Ap. Angl.* ii. 34. 2. t. 15. f. 1, 2, ♂, ♀.
Apis pallicincta, *Kirby, Mon. Ap. Angl.* ii. 295. 67, ♀.
Apis fodiens, *Fourc. Ent. Par.* ii. 444. 7.
Colletes fodiens, *Smith, Zool.* iv. 1277. 2.
Luc. Explo. Sc. Alger. p. 182. 90?

Hab. Britain; France; Germany; Turkey; Africa.

3. Colletes marginata. B.M.

Apis marginata, *Linn. MSS. Cab. Mus. Linn. Soc.* ♂.
Colletes marginata, *Smith, Zool.* iv. 1277. 3, ♂, ♀.
Colletes succincta, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 206. 1.

Hab. Britain; Sweden.

4. Colletes balteata.

Colletes succincta, *Latr. Hist. Nat.* xiii. 359.
St. Farg. Hym. ii. 297. 2.
Colletes balteatus, *Nyland. Revis. Ap. Boreal.* p. 248.

Hab. France.

5. Colletes impunctata.

Colletes impunctata, *Nyland. Revis. Synop. Ap. Boreal.* p. 249.
Hab. Finland.

6. Colletes Daviesana. B.M.

Melitta Daviesana, *Kirby, MSS.*
Colletes Daviesana, *Smith, Zool.* iv. 1278. 4, ♂, ♀.
Hab. Britain; France; Finland.

7. Colletes cunicularia.

Apis cunicularia, *Linn. Faun. Suec.* p. 422, 1698; *Syst. Nat.* i. 957. 23.
Colletes hirta, *St. Farg. & Serv. Encyc. Méth.* x. 406. 1.
St. Farg. Hym. ii. 296. 1. t. 15. f. 2 ♀, 3 ♂.
Luc. Expéd. Sc. Alger. iii. 182. 89.
Hab. France; Sweden; Algeria.

8. Colletes nasuta, n. s. B.M.

Female. Length 5 lines.—Black, head and thorax coarsely punctured; the clypeus very much produced, and slightly rounded at the apical margin; the labrum has five deep longitudinal impressions; the mandibles at two-thirds of their length are bent abruptly, forming sharp angles at their outer margins; the face is clothed with long white pubescence; the thorax above clothed with long pale pubescence, slightly tinged with fulvous; that on the sides, beneath, and on the femora white; the tibiæ and tarsi have a short silvery pubescence, that on the basal joint of the tarsi beneath yellow; the claws ferruginous. The abdomen has the basal segment roughly punctured, the following segments each successively more finely so; the apical margins depressed and having a band of white pubescence, that on the basal segment being the narrowest; beneath, the margins are fringed with white pubescence.

Male.—Closely resembles the female, but the clypeus not so much produced, and the face clothed with white pubescence.

Hab. Polish Ukraine.

9. Colletes dimidiata.

Colletes dimidiata, *Brullé, Hist. Nat. Il. Canar.* ii. 86. 23. t. 3. f. 9.
Hab. Canary Islands.

10. Colletes pilosa.

Colletes pilosa, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 307. 51; *Expéd. d'Egypte*, t. 7. f. 24?

Hab. Egypt.

11. Colletes intricans.

Colletes intricans, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 507. 52.

Hab. Egypt.

12. Colletes canescens, n. s. B.M.

Female. Length 5¼ lines.—Black, the face clothed with white pubescence; the anterior margin of the clypeus reflexed and deeply furrowed, the head closely punctured; the disk of the thorax coarsely punctured and clothed with pubescence of a dirty white colour, at the sides and beneath it is white; the wings hyaline, not clouded at their apex; the abdomen closely punctured, the basal segment coarsely so; the apical margins of all the segments have a continuous fascia of snow-white pubescence.

Hab. Algeria.

13. Colletes fasciata, n. s.

Female. Length 6 lines.—The face thinly clothed with ochraceous pubescence; the clypeus rugose, with elongate punctures which run into irregular striæ; thorax strongly punctured, its pubescence ochraceous, intermixed with fuscous hairs on the disk; beneath the post-scutellum is a rugose enclosed space; wings fusco-hyaline, the tegulæ and nervures rufo-testaceous; the legs are dark rufo-testaceous, their pubescence ochraceous; the floccus is of the same colour, and also the scopa on the posterior tibiæ. Abdomen obconical; the apical margins of the segments have a broad fascia of short orange-coloured pubescence; beyond the third, covering the entire exposed part; the sixth segment covered with black pubescence, beneath black, the margins of the segments narrowly testaceous.

Hab. Cape of Good Hope. (Coll. F. Smith.)

14. Colletes nigriventris, n. s. B.M.

Female. Length 6½ lines.—Black, the face and the thorax above clothed with fulvous pubescence; on the latter beneath as well as the head it is a little paler; the anterior and intermediate femora have beneath a long fringe of pale fulvous pubescence; that on the posterior femora, as well as that on the legs, otherwise is black, excepting on the tarsi beneath, where it is ferruginous; all the claws ferruginous; the wings hyaline, their mar-

gins having a fuscous cloud, the tegulæ testaceous. The basal segment of the abdomen has a thin fringe of pale fulvous pubescence, that on the other segments above and beneath is black; the abdomen is very black and shining, and delicately punctured.
Hab. Chili.

15. Colletes occidentalis.

Colletes occidentalis, *Halid. Linn. Trans.* (1837) xvii. 322.
Hab. Chili. (Coll. W. Wilson Saunders, Esq.)

16. Colletes cyanescens.

Andrena cyanescens, *Halid. Linn. Trans.* (1837) xvii. 321.
Hab. Chili. (Coll. W. Wilson Saunders, Esq.)

17. Colletes ursina, n. s. B.M.

Female. Length 5 lines.—Black, entirely clothed with sooty black pubescence; on the face and cheeks it is silvery, as well as on the tarsi beneath; the latter has in certain lights a golden tinge; the wings subhyaline and beautifully iridescent, their nervures black; the legs very dark rufo-piceous, the claws ferruginous.
Hab. Columbia.

18. Colletes mandibularis, n. s. B.M.

Male. Length 3 lines.—Black; the face, thorax and legs clothed with bright lemon-yellow-coloured pubescence; the antennæ beneath, except the two basal segments, fulvous; the mandibles bright ferruginous; the wings hyaline, iridescent, and having their tegulæ and nervures ferruginous; all the tarsi and the calcariæ pale ferruginous; the basal segment of the abdomen fringed with long pubescence, and all the apical margins of the segments banded with pubescence of a lemon-yellow colour.
Hab. Georgia.

19. Colletes thoracica, n. s. B.M.

Female. Length 6 lines.—Black, the clypeus coarsely punctured, the face thinly clothed with pale pubescence, that on the disk more dense and fulvous; the thorax above clothed with bright fulvous pubescence, beneath it is nearly white; on the posterior femora and tibiæ beneath, the pubescence is of changing golden yellow, the floccus palest, on the legs above it is fuscous; the claws ferruginous; the tegulæ ferruginous, as well as the neuration of the wings, the wings being hyaline, and having

a slight cloud on their apical margins. The abdomen very shining, and delicately punctured; the base has a thin long pale pubescence; on the apical margins of the first and two following segments laterally is a narrow fringe of white pubescence; on the margin of the fourth segment it is usually continuous beneath; the margins have a fringe of white pubescence.

Male. Length 5 lines.—Closely resembles the female, but has the face densely clothed with long bright fulvous pubescence; the apical margins of the segments of the abdomen have continuous white bands, usually more or less interrupted on the first and second.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

Genus 2. PARACOLLETES.

Paracolletes, *F. Smith's MSS.*

Head not so wide as the thorax, eyes lateral, elongate-ovate; the stemmata placed in a curve on the front of the vertex; antennæ subclavate, the third joint longer than the second or fourth; labrum concealed, rounded in front; mentum elongate, gradually narrowing towards its base, which is conical, in front produced into a sharp angle, from the point of which descends an abbreviated channel; anteriorly rounded; the paraglossæ obtuse, short, and placed laterally; labial palpi four-jointed, the basal joint as long as the two following united; third and fourth joints of equal length. Maxillary palpi six-jointed, the basal joint a little the longest, the rest of about equal length, each joint much narrower than the preceding, all being conical. Thorax, superior wings having one oblong marginal cell, truncate at the apex, from which emanates an abbreviated nervure; three submarginal cells, the first as long as the two following united; the second a little longer than broad, the transverse nervures parallel, oblique; the third narrowed nearly one-half towards the marginal; the first recurrent nervure received by the second submarginal cell about the middle, the second received by the third submarginal near its apex. Legs short, stout, posterior tibiæ slightly curved, and the basal joint of the tarsi as broad as the tibia, and three-fourths of its length. Abdomen elongate-ovate, furnished with an anal fimbria. (Plate I. Details.)

1. PARACOLLETES CRASSIPES, n. s. B.M.

Female. Length 7 lines.—Black, the head clothed with ochraceous pubescence, palest on the face and cheeks; the basal joint of the antennæ black, the following joints ferruginous beneath; the clypeus coarsely punctured; the labrum and apex of

the mandibles rufo-piceous. Thorax above clothed with ochraceous pubescence, beneath and on the femora it is of a paler hue; on the metathorax and on the basal segment of the abdomen it is nearly white; the legs rufo-piceous, above clothed with fuscous pubescence; the posterior tibiæ and basal joint of the tarsi dilated, the former bent inwardly; the anterior tibiæ bright ferruginous in front; on the metathorax below the post-scutellum is a smooth shining enclosed space; the wings hyaline, their nervures and tegulæ rufo-testaceous. Abdomen dark rufo-testaceous, having a green metallic tinge, finely punctured, the basal segment slightly situated at its anterior margin; the fifth and sixth segments clothed with black pubescence, the latter has a central longitudinal smooth space. The margins of the segments beneath are fringed with pale ochraceous pubescence. The pubescence on the thorax viewed under a moderate magnifying power is beautifully plumose.

Hab. Swan River.

Genus 3. PTILOGLOSSA.

Ptiloglossa, *F. Smith's MSS.*

Head transverse, much narrower than the thorax; eyes slightly approximating at their vertex, ocelli placed in a triangle. The third joint of the antennæ clavate, about the same length as the scape, the fourth very short, the rest of about equal length. The mentum elongate, narrowed towards the base, which is rounded; the apex blunted; the labium very short, densely pubescent; the paraglossæ elongate, very pubescent; the labial palpi four-jointed, short and stout; the basal joint cylindric, as long as the two following; maxillary palpi six-jointed, gradually attenuating to the apex; the second to the fourth joints slightly narrowed at their base; the labrum rounded. Thorax rounded; the anterior wings having one elongate marginal cell pointed at the base, the extreme apex truncate, the first submarginal cell rather longer than the two following, the second very narrow, attenuated towards the marginal; the first recurrent nervure uniting with the first, and the second uniting with the third transverse nervure. Abdomen nearly conical, emarginate at the base. (Plate I. Details.)

1. Ptiloglossa ducalis.

Female. Length 8 lines.—Head and thorax black, the clypeus very convex, naked; the face otherwise clothed with short griseous pubescence intermixed with long black hairs; the cheeks clothed with white pubescence. Thorax densely clothed above

with sooty black pubescence, palest on the sides and beneath; the legs dark fusco-ferruginous, above clothed with dark fuscous pubescence; the flocculus on the posterior femora long, thick and of a pale yellow; the fringe on the tibiæ pale; the tibiæ much dilated, slightly bent inwardly; the basal joint of the tarsi broadly dilated, the second heart-shaped, the third narrower, but of the same length and shape, the fourth very small; claws short, stout and somewhat blunt; anterior wings having one marginal cell, the radial nervure of which curves inwardly to the point of union with the transverse nervure of the second submarginal cell, from whence it is straight to the transverse nervure of the third submarginal, whence it passes obliquely upwards to the apex of the costal nervure; the second submarginal cell not more than one-fifth as wide as the first submarginal, the third slightly narrowed towards the marginal. Abdomen delicately punctured, green, the base of the first segment and its sides densely covered with pale, nearly white pubescence, the apex clothed with sooty black hairs; beneath the abdomen is fulvous, except towards the apex, the margins of the segments depressed and fringed with fulvous pubescence, the fourth and fifth with black.

Hab. Not known. (Coll. W. Wilson Saunders, Esq.)

Genus 4. LEIOPROCTUS.

Leioproctus, *F. Smith's MSS.*

Head transverse, nearly orbicular, of about the width of the thorax; antennæ placed in a slight curve on the vertex; mentum of moderate length, about three-fourths longer than the labium; the latter emarginate at the apex, and having at about half its length a transverse process notched in the middle and sinuated on each side; at the lateral extremities of this process are placed the paraglossæ, dilated and pubescent at their apex; the labial palpi four-jointed, the basal joint about equal in length to the two following; the maxillary palpi six-jointed, the three basal ones of equal length, the following gradually a little shorter, the apical one very slender. Thorax ovate, the superior wings having one elongate marginal cell, rounded at its apex, and three submarginal cells; the first about equal in length to the two following, the second narrowed towards the marginal, receiving the first recurrent nervure in the middle, the third also much narrowed towards the marginal, receiving the second recurrent nervure near its apex; spurs of the posterior tibiæ simple. Abdomen elongate-ovate, having an anal fimbria on the fifth segment; the sixth pubescent at the sides, naked down the centre. (Plate I. Details.)

1. Leioproctus imitatus, n. s. B.M.

Female. Length 4⅓ lines.—Black, at the base of the antennæ a little pale yellow pubescence; the clypeus bright, smooth, and having deep punctures; the antennæ testaceous beneath. Thorax very smooth and shining above, having a few scattered punctures; the metathorax has an enclosed smooth shining space below the post-scutellum; the disk is thinly clothed with pale yellow pubescence, that on the sides, beneath, and on the femora trochanters and coxæ is nearly white; the legs dark rufo-testaceous, their claws ferruginous; the scopa of the posterior tibiæ fulvous; the nervures of the wings ferruginous; the wings hyaline, and beautifully iridescent. Abdomen nigro-æneous, the margins of the segments piceous; the fourth and fifth segments have a thin fringe of pale fulvous pubescence, the sixth clothed with the same, but having a smooth longitudinal space in the centre, widest at the base.

Hab. New Zealand.

2. Leioproctus elegans, n. s.

Female. Length 4½ lines.—Blue-green, the face and cheeks thinly covered with cinereous pubescence; head strongly punctured, the flagellum beneath testaceous towards the apex. Thorax above strongly and not very closely punctured, thinly covered with cinereous pubescence, intermixed with black on the disk and slightly ochraceous at the sides, the enclosed space at the base of the metathorax immediately beneath the post-scutellum impunctate and highly polished; the wings subhyaline, slightly clouded at their apex, the nervures dark brown; legs dark rufo-testaceous; all the femora beneath fringed with silvery white hairs, floccus and the scopa beneath of the same colour, the latter fuscous above towards the base of the tibiæ, the tarsi beneath fulvous, the claw-joints ferruginous. Abdomen rather strongly punctured, sparingly at the base; margins of the segments slightly depressed, the apical fimbria bright fulvous.

Hab. Adelaide. (Coll. F. Smith.)

3. Leioproctus frontalis, n. s.

Female. Length 4 lines.—Black, head shining, the punctures deep and not very close, those on the clypeus large and deeply impressed; the clypeus rounded in front and strongly marginate; at the base of the clypeus is a triangular elevation, from which a sharp elevated carina passes upwards, terminating a little before the anterior ocellus, at the termination commences a deep channel which runs up to and encircles the ocellus; the antennæ tes-

taceous beneath; the pubescence thin on the face, and griseous; that on the vertex fuscous, as well as that on the disk of the thorax, which is very sparing; on the sides it is more dense, also on the femora, where it is nearly white, a tuft of pure white on the tubercles; the legs fusco-ferruginous, their tarsi palest; the scopa is white, having a beautiful golden reflection above; the wings hyaline. Abdomen closely punctured, and having a tinge of metallic green, the margins broadly depressed, the depressions rufo-piceous as well as the sixth segment above, which is longitudinally striate: the sides of the abdomen have a little scattered white pubescence, the fifth segment covered with long black pubescence as well as the sides of the sixth; beneath, the abdomen is rufo-piceous, the apical segment smooth and shining at its base, having on each side an impressed line running its entire length.

Male closely resembling the female, its mandibles bright ferruginous, its face densely covered with silvery white hair; the general colouring darker, or more matured than in the female; the abdomen beneath has a thick fringe of suberect hair on the margins of the third and fourth segments.

Hab. New Holland. (Coll. F. Smith.)

Genus 5. LAMPROCOLLETES.

Lamprocolletes, *F. Smith's MSS.*

Head transverse, nearly rounded in front; ocelli placed in a slight curve. Mentum rather more than twice the length of the labium, which is situated on each of its anterior margins, thickly fringed with pubescence; the paraglossæ longer than the tongue, dilated and pubescent at the apex; labial palpi four-jointed, the basal one bent, about the length of the two following, the apical joint very slender; maxillary palpi six-jointed, the three basal joints of about equal length, the following gradually a little shorter, the apical one very slender. Thorax nearly ovate, the wings having one elongate marginal cell, twice the length of the second and third submarginal cells, the first submarginal being of equal length to the two following; the second submarginal cell narrowed towards the marginal, receiving the first recurrent nervure in the middle, the second recurrent nervure uniting with the apical nervure of the third submarginal cell; one of the spines at the apex of the posterior having on one side a row of bent teeth or hooks resembling a comb; the pubescence of the scopa beautifully pectinate or feathery. Abdomen ovate, furnished with an anal fimbria, and the sixth segment with a naked space margined laterally. (Plate I. Details.)

1. Lamprocolletes chalybeatus. B.M.

Andrena chalybeata, *Erichs. Wiegm. Arch.* (1842) p. 268. 243.
Hab. Van Diemen's Land.

2. Lamprocolletes obscurus, n. s. B.M.

Female. Length 5 lines.—Black, head strongly punctured, particularly on the clypeus; apex of the mandibles ferruginous: a few scattered griseous hairs on the face below the insertion of the antennæ, above it is fuscous. Thorax, the disk shining, sparingly punctured, and clothed with fuscous pubescence, at the sides and beneath; on the coxæ, fringe of the femora and the floccus, it is of a dirty white; the scopa above fuscous, beneath of a pale golden yellow; all the tarsi beneath fulvous, the claws ferruginous, as well as the calcariæ; the wings subhyaline, having a prismatic reflection, their nervures and stigma fusco-ferruginous. Abdomen smooth and shining, the fifth segment clothed with sooty-black pubescence; beneath, the margins fringed with pale hairs, which have a golden tinge.

Male. Length 3½ lines.—Closely resembles the other sex, the abdomen having an obscure æneous tinge, and being of a short ovate form; the margins of the segments narrowly rufo-piceous. The pubescence in this species slightly magnified is beautifully plumose, particularly on the disk of the thorax, the floccus and scopa of the female.

Hab. Van Diemen's Land.

3. Lamprocolletes cristatus, n. s.

Female. Length 4½ lines.—Black, the face covered with griseous pubescence, the clypeus covered with large punctures. Thorax shining, sparingly punctured; the collar has a fringe of fulvous pubescence, the tubercles, scutellum and post-scutellum have dense tufts of the same colour; wings subhyaline, slightly clouded at the apical margins, the nervures fuscous, the scopa on the posterior tibiæ fuscous intermixed with silvery white hairs; the abdomen very shining, the second and following segments finely punctured at their base, the anal fimbria black; beneath, the segments have a pale marginal fringe.

Hab. N. Holland. (Coll. W. Wilson Saunders, Esq.)

4. Lamprocolletes carinatus, n. s. B.M.

Female. Length 5 lines.—Head and thorax bright green, with shades of purple on the clypeus and disk of the thorax; strongly punctured, particularly on the clypeus and scutellum; the face thinly covered with short white pubescence; the thorax

above thinly clothed with fuscous pubescence, beneath it is nearly white, as well as that on the coxæ and trochanters; on the legs it is black, except that on the tarsi beneath, which is fuscous; the claws ferruginous. Wings hyaline; below the postscutellum is a transverse elevated carina, beneath which the metathorax is coarsely punctured. Abdomen blue, with a greenish tinge; sparingly punctured above, more closely so at the sides and beneath; the pubescence at the apex black; the second and third segments beneath are fringed with pale pubescence, on the following it is fuscous.

Hab. New Holland.

5. LAMPROCOLLETES PLUMOSUS, n. s. B.M.

Female. Length 5 lines.—Head and thorax of a metallic green, covered, but not closely, with deep punctures; the apical joints of the antennæ beneath fulvous; the pubescence on the face is short and silvery, on the vertex it is fuscous. The thorax beneath is opake, above bright and shining; the pubescence is fuscous or dirty white, rather palest beneath; each hair under a low magnifying power is beautifully plumose, as well as that on other parts of the insect; the legs rufo-piceous; the scopa on the posterior tibia is dark fuscous above, beneath it is silvery white; the wings clear hyaline, their tegulæ rufo-piceous. Abdomen blue, with scattered punctures, the margins of the segments smooth and shining; the pubescence on the apical segment black; beneath, the basal half of abdomen is rufo-piceous, the margins of the segments fringed with long pale hair.

Hab. Swan River.

6. LAMPROCOLLETES IRRORATUS, n. s.

Female. Length 4 lines.—Black, the face above finely strigose, the clypeus having scattered deep punctures; the thorax above very delicately punctured; the shoulders have a broad epaulet of scale-like pubescence; the floccus silvery grey; the scopa beneath of the same colour, above fuscous. Abdomen black with an olive reflection, the anal fimbria black; beneath, the margins of the segments are fringed with silvery grey pubescence.

Hab. Port Philip. (Coll. W. Wilson Saunders, Esq.)

7. LAMPROCOLLETES CINEREUS, n. s. B.M.

Female. Length 5 lines.—Black, the pubescence on the face cinereous, the clypeus coarsely punctured, apex of the mandibles ferruginous. Thorax closely and moderately punctured, the pu-

bescence cinereous, most dense at the sides of the metathorax, the enclosed space at the base of the latter smooth, shining and transversely striate at the base; wings hyaline, slightly clouded at the apex; nervures black, the pubescence on the femora and posterior tibiæ beneath silvery white, fulvous on the tarsi beneath and fuscous on the tibiæ above, the claws ferruginous. Abdomen ovate, shining, the segments at and towards their base closely punctured, their apex smooth and impunctate; the apical margins depressed and having laterally a short fringe of white pubescence, the anal fimbria black.

Hab. South Australia.

8. Lamprocolletes aurifrons.

Male. Length 4 lines.—Black, head a little wider than the thorax, the face thickly covered with bright golden-coloured pubescence; the antennæ testaceous beneath, the scape black. Thorax, the pubescence on the disk fulvous, that on the sides, beneath and on the legs is pale golden yellow; the tibiæ and tarsi pale ferruginous; the tegulæ testaceous; wings hyaline, splendidly prismatic, their nervures ferruginous. Abdomen conical, nigro-æneous, and having the margins of all the segments testaceous; beneath, the fourth and fifth segments have a short, thick fringe of bright golden yellow-coloured pubescence.

Hab. Adelaide. (Coll. F. Smith.)

9. Lamprocolletes cupreus, n. s.

Female. Length 5 lines.—Head and thorax bright green, the abdomen coppery; the pubescence on the face and cheeks white, slightly fuscous on the vertex; the clypeus coarsely punctured; the antennæ ferruginous beneath except the three basal joints, which are black. Thorax, above the pubescence is sparing and slightly fuscous, beneath and on the coxæ and femora it is dense, long and white, above strongly punctured; the tegulæ rufo-testaceous as well as the stigma, the nervures of a little darker red; the wings clear hyaline, beautifully prismatic; the anterior and intermediate tarsi and the posterior tibiæ and tarsi ferruginous, their pubescence pale fulvous; at the base of the abdomen is a little white pubescence, the rest of the upper surface is thinly covered with short pale fulvous pubescence, the fifth segment is clothed with long pubescence of the same colour, the margins of the segments beneath are fringed with similar long hair; above the abdomen is very delicately and beneath strongly punctured.

Hab. Adelaide. (Coll. F. Smith.)

10. Lamprocolletes punctatus.

Female. Length 4 lines.—Black, the face clothed with hoary pubescence, the vertex with dirty white, the clypeus deeply punctured, rounded in front, antennæ beneath testaceous. Thorax above smooth, shining and distantly punctured, clothed thinly with pale ochraceous pubescence, palest and most dense on the sides, particularly of the metathorax, which is rounded and very delicately punctured; wings hyaline, nervures pale testaceous; legs rufo-piceous fringed with pale bright yellow pubescence, that on the tarsi within is fulvous, the floccus nearly white; the scopa has a pale golden lustre beneath, above it is fuscous, the claws ferruginous. Abdomen depressed, shining, closely and rather finely punctured, margins of the segments depressed and thinly fringed with pale fulvous pubescence; the fifth segment has a pale fulvous fimbria intermingled with fuscous hairs which clothe the sides of the sixth, its centre being occupied by a naked longitudinal space.

Hab. Adelaide. (Coll. F. Smith.)

11. Lamprocolletes versicolor.

Female. Length 4 lines.—Black, the head closely punctured, deeply and distantly so on the clypeus, which is smooth, shining and rounded in front; on the face a little griseous pubescence, that on the vertex fuscous. Thorax very smooth and shining, with distant fine punctures; metathorax rounded; tegulæ shining nigro-piceous; the wings subhyaline, iridescent; beneath is a thin pale pubescence, as well as on the sides of the metathorax; legs dark rufo-piceous, apical joints of the tarsi ferruginous, the floccus on the posterior legs white, the scopa silvery white beneath, fuscous above, the tarsi within fulvous. Abdomen depressed, oval, of a blue-green with a silken gloss; the apical segment clothed with fuscous pubescence; beneath, the margins of the segments have a long fringe of pale yellow pubescence.

Hab. Adelaide. (Coll. F. Smith.)

Genus 6. DASYCOLLETES.

Dasycolletes, *F. Smith's MSS.*

Head transverse, rounded in front; antennæ, the basal joint elongate arcuate, about one-third of the entire length; the stemmata placed in a slight curve; the mentum short and broad, anteriorly pointed in the middle, recurved on each side; the labium deeply emarginate at the extremity; the paraglossæ

scarcely longer than the labium, broad and rounded at their apex; the labial palpi four-jointed, each joint slightly narrower. Maxillary palpi six-jointed, the two basal ones of equal length; the third, two-thirds of the length of the second, the three apical ones being of about equal length, each gradually narrower than the preceding joint, apical joint filiform. Thorax ovate, the superior wings having one elongate marginal cell rounded at its extremity and emitting a short appendicular nervure; submarginal cells three, the first equal to the two following in length, the second equally narrowed on each side towards the marginal, receiving the first recurrent nervure in the middle; the third submarginal cell narrowed about one-third towards the marginal, the apical transverse nervure curved outwardly. (Plate I. Details.)

1. Dasycolletes metallicus, n. s. B.M.

Female. Length 5 lines.—Black, the face thickly clothed with ochraceous pubescence, that on the vertex is fuscous; the antennæ testaceous beneath, the disk of the thorax shining, sparingly punctured, and thinly clothed with ochraceous pubescence, which is more dense on the sides, metathorax, and beneath; the pubescence beautifully plumose viewed under a moderate magnifying power; the legs very pubescent; the scopa on the posterior tibiæ pale fulvous; the wings hyaline. Abdomen metallic green, the margins of the segments testaceous, covered with a thin, short, ochraceous pubescence, most dense on the sides and at the apex; beneath, the segments have a marginal fringe of long, pale, fulvous pubescence.

The male closely resembles the female, but is rather smaller.

Hab. New Zealand.

2. Dasycolletes purpureus, n. s. B.M.

Male. Length 3 lines.—Dark purple, the face clothed with griseous pubescence, the vertex with fuscous; on the thorax above it is also fuscous, but at the sides and on the legs it is griseous; the legs dark fusco-ferruginous, the apical joints of the tarsi ferruginous; on the metathorax, beneath the post-scutellum is an enclosed smooth shining space; the wings hyaline, beautifully iridescent, their nervures and tegulæ fusco-ferruginous. Abdomen shining, and having a little fuscous pubescence at the apex; beneath slightly piceous.

Hab. New Zealand.

Genus 7. ANTHOGLOSSA.

Anthoglossa, F. Smith's MSS.

Head transverse, ocelli placed in a triangle on the vertex; antennæ geniculated, the flagellum subclavate, truncate at the apex, in the male the apical joint dilated at the apex and hollowed out; the clypeus rounded anteriorly; labrum concealed, rounded anteriorly; mandibles compressed or flattened, slightly curved inwardly, dilated at their apex into an oblique obtuse tooth, furnished with a minute one within; the mentum elongate, the labium being about one-fourth of its length; the labium slightly rounded at its apex, which is ciliated with short hairs; the paraglossæ nearly as long as the labium, dilated and rounded at their apex; the labial palpi four-jointed, the basal joint being nearly as long as the three following united; the maxillary palpi six-jointed, each joint gradually decreasing in length, the apical one cylindric. Thorax rotundate, the superior wings having one marginal and three submarginal cells, the former truncate at the apex; the first submarginal not quite so long as the two following, the second longer than broad, its transverse nervures oblique, nearly parallel, the third narrowed by one-half towards the marginal cell. Abdomen elongate-ovate, the fifth segment furnished with an anal fimbria. (Plate IV. Details.)

1. ANTHOGLOSSA PLUMATA. B.M.

Female. Length 6½ lines. — Black, the face on each side clothed with hoary pubescence, gradually becoming darker towards the vertex, on which the hairs are pale at their base and black at their apex; the clypeus closely and strongly punctured, above which is a smooth and shining triangular prominence; the labrum and mandibles ferruginous. Thorax clothed with pubescence of dark hue, being pale at the base and black at the apex of the hairs; beneath it is fulvous; the legs dark ferruginous, the anterior and intermediate trochanters compressed; the apex of the anterior coxæ armed with long obtuse spines, or processes rounded at their apex; all the legs covered with fulvous pubescence, the posterior pair densely; tegulæ nigro-piceous, very smooth and shining; the wings fusco-hyaline, slightly clouded at their apex. Abdomen oblong-ovate, the basal segment thinly clothed with pubescence similar to that on the thorax; the second, third and fourth segments have a narrow white fascia on their apical margins, the fifth densely fringed with fulvous pubescence; the apical segment ferruginous, having a central naked space, the margins of which are raised, smooth and shining, the centre closely covered with deep elongate punctures.

Male.—Resembling the female, the face densely clothed with long fulvous pubescence, the basal segment of the antennæ bright ferruginous, the flagellum moniliform, the apical segment dilated, truncate, the truncation hollowed out. Thorax, the pubescence pale fulvous at the base, becoming darker at its apex; on the metathorax it is of a pale fuscous; beneath, anteriorly pale fulvous, posteriorly white; all the tibiæ and tarsi bright ferruginous. Abdomen elongate-ovate, having a silky gloss, the margins of the segments white; the two basal segments have a thin pale fulvous pubescence, on the three following it is black; the apical segment ferruginous, rugose; beneath rufo-piceous, the segments fringed with white pubescence. The pubescence in both sexes of this species is beautifully plumose; each individual hair, particularly on the thorax and posterior tibia, is feathered, which is observable under a moderate magnifying power.

Hab. W. Australia.

Genus 8. EURYGLOSSA.

Euryglossa, *F. Smith's MSS.*

Head transverse, in front orbicular, antennæ inserted about the middle of the face, flagellum subclavate, eyes lateral elongate-ovate; ocelli placed forwards on the vertex in a triangle; mentum moderate in length, broad, rounded at the base; the labium broad, slightly emarginate in front, its sides rounded; paraglossæ short and rounded; the labial palpi four-jointed, the two basal joints much stouter than the two following, the third and fourth joints longer than the second, the third clavate, the fourth subcylindric; the basal portion of the maxillæ twice as long as the lobe, the lobe rounded and broad at its apex, its apical margin ciliated; the maxillary palpi six-jointed, the basal joint stout, gradually tapering to the apical joint, which is cylindric, the labrum angulated, its margin ciliated. The superior wings have one marginal and two submarginal cells, the former not quite so long as the two latter united; the first recurrent nervure received just within the second submarginal, the second recurrent nervure uniting with the second transverse nervure. Abdomen depressed, subovate. (Plate II. Details.)

1. Euryglossa cupreo-chalybea, n. s. B.M.

Female. Length 4 lines.—Head and thorax nigro-æneous, deeply but not closely punctured, clypeus subconvex. Thorax, the disk shining; the enclosed space on the metathorax very smooth and shining; wings fuscous, the apical margins palest; beneath closely punctured, the legs nigro-piceous, having a scat-

tered hoary pubescence, most dense above, on the tarsi beneath pale fulvous, apical joints of the tarsi ferruginous. Abdomen chalybeous, very closely punctured, margins of the segments smooth and shining, beneath they are rufo-piceous.

Hab. N. Holland.

2. EURYGLOSSA TERMINATA.

Female. Length 4 lines.—Black, head strongly punctured, the face rather convex; the clypeus shining, the punctures scattered; the antennæ nigro-piceous, the apex of the joints of the flagellum beneath testaceous. Thorax, the disk shining, the punctures large but scattered, interspersed with finer ones; the metathorax above smooth and shining; the legs dark ferruginous, their pubescence very thinly scattered, except that on the tarsi and posterior tibia, which is silvery white. Abdomen impunctate, having a silken gloss, the margins of the segments narrowly testaceous, the fifth segment bright fulvous, its pubescence being of the same colour.

Hab. New Holland. (Coll. W. Wilson Saunders, Esq.)

3. EURYGLOSSA DEPRESSA, n. s.

Female. Length 4½ lines.—Head and thorax black, the former closely punctured; the clypeus convex, shining, having large deep punctures not so dense as on the rest of the head; on each side of the face close to the margin of the eyes a broad depression commencing in a line with the insertion of the antennæ and terminating opposite the posterior stemmata; margin of the vertex fringed with pale yellow hairs. Thorax, above shining, the punctures fine and distant; the enclosed space on the metathorax very smooth and shining, sides of the metathorax fringed with white pubescence; the tarsi rufo-piceous, clothed beneath with pale fulvous pubescence. Abdomen dark green, having a satiny gloss, the margins of the segments black and shining; the base of the abdomen deeply sinuated; beneath, the basal margin of the segments highly polished and shining.

Hab. New Holland. (Coll. F. Smith.)

Genus 9. PROSOPIS.

Apis, pt., *Linn. Syst. Nat.* p. 953, 1766.
Hylæus, pt., *Fabr. Ent. Syst.* ii. 302, 1793.
Sphex, pt., *Panz. Faun. Germ.*
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 134, * *b*, 1802.
Prosopis, pt., *Fab. Syst. Piez.* p. 293, 1804.

A. *The first recurrent nervure not entering the second submarginal cell.* (Plate I. Wing.)

1. PROSOPIS ANNULATA.

Apis annulata, *Linn. Faun. Suec.* p. 413, 1706; *Syst. Nat.* i. 958, *& Cab. Mus. Linn. Soc.*
Hylæus borealis, *Nyland. Ap. Boreal. Supp. Soc. Sc. Fenn.* p. 94.
Hab. Sweden; Finland.

2. PROSOPIS COMMUNIS. B.M.

Hylæus annulatus, *Fab. Ent. Syst.* ii. 305. 12, ♀.
Panz. Faun. Germ. 55. 3.
Latr. Hist. Nat. xiii. 360. 1.
Zett. Ins. Lap. p. 463. 1.
Smith, Trans. Ent. Soc. iv. 29. 1; *Zool.* vi. 2202. 2, ♂ ♀.
Melitta annulatus, *Kirby, Mon. Ap. Angl.* ii. 36. 3, ♂ ♀, & t. 15. f. 3, ♀.
Prosopis annulata, *Fab. Syst. Piez.* p. 293. 1.
Spin. Ins. Lig. i. 112. 3.
Nyland. Act. Soc. Sc. Fenn. p. 187. 1.
Prosopis signata, *St. Farg. Hym.* ii. 537. 4, var.
Hylæus communis, *Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 234.
Hab. Britain; France; Germany; Finland; Denmark; Sweden.

3. PROSOPIS ANNULARIS. B.M.

Sphex annulata, *Panz. Faun. Germ.* 53. 1, ♂.
Mellinus labiatus, *Fabr. Ent. Syst. Supp.* p. 267. 7–8, ♂.
Melitta annularis, *Kirby, Mon. Ap. Angl.* ii. p. 38. 4, ♂ ♀.
Prosopis labiata, *Fab. Syst. Piez.* p. 299. 12.
Brullé, Expéd. de Morée, iii. 359. 793, ♂.
Prosopis annularis, *Brullé, Expéd. de Morée*, iii. 359. 794, ♀?
Hylæus annularis, *Smith, Trans. Ent. Soc.* iv. 30. 2; *Zool.* vi. 2202. 3.
Prosopis armillatus, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 189. 3.
Hylæus armillatus, *Nyland. Supp. Ap. Boreal.* p. 233. 3.
Hab. Britain; France; Germany; Denmark; Sweden.

4. PROSOPIS SIGNATA. B.M.

Sphex signata, *Panz. Faun. Germ.* 53. 2.
Melitta signata, *Kirby, Mon. Ap. Angl.* ii. 41. 6, ♂ ♀.
Prosopis atrata, *Fab. Syst. Piez.* p. 295. 10, ♂.

Prosopis signata, *St. Farg. Hym.* ii. 537. 4.
Hylæus signatus, *Smith, Trans. Ent. Soc.* iv. 30. 3; *Zool.* vi. 2206. 9, ♂ ♀.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

5. Prosopis dilatata. B.M.

Melitta dilatata, *Kirby, Mon. Ap. Angl.* ii. 39. 5. t. 15. f. 4, ♂.
Hylæus dilatatus, *Latr. Hist. Nat.* xiii. 361. 2.
Curt. Brit. Ent. viii. t. 373, ♂.
Smith, Trans. Ent. Soc. iv. 31. 4. t. 3. f. 1; *Zool.* vi. 2204. 4.
Prosopis signata, *St. Farg. Hist. Nat. Ins.* ii. 537. 4, var.
Prosopis dilatata, *Nyland. Act. Soc. Sc. Fenn.* p. 188. 2, ♂.
Hab. England; France; Germany; Sweden; Finland.

6. Prosopis confusa.

Hylæus signatus, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 190. 4.
Hab. Sweden; Denmark; Finland.

7. Prosopis tuberculata, n. s. B.M.

Male. Length 3 lines.—Black; head and thorax deeply punctured, the face below the insertion of the antennæ cream-coloured; scape of the antennæ black, much dilated, the flagellum beneath rufous. Thorax, a spot on each side of the collar, the tubercles, and the tegulæ anteriorly cream-coloured; the enclosed space on the metathorax below the post-scutellum very rugose; the anterior tibia in front and the tarsi ferruginous, the latter stained with fuscous above. Abdomen shining, distinctly punctured, the third and fourth segments beneath, each having at their base an elevated compressed tubercle, their margin rounded; the posterior tubercle much smaller than the anterior, sometimes nearly obsolete.

This species is very like *P. signata*, but differs in the following particulars: the scape is much more dilated, the wings are fusco-hyaline, and the recurrent nervures unite with those of the second submarginal cell, which is wider than in *P. signata*; the abdomen has no white pubescence at the sides of the margin of the basal segments, and is more strongly punctured; the tubercles beneath much more elevated.

Hab. France.

8. Prosopis hyalinata. B.M.

Melitta annulata, *Kirby, Mon. Ap. Angl.* ii. 37, var. β.
Hylæus hyalinatus, *Smith, Trans. Ent. Soc.* iv. 33. 9; *Zool.* vi. 2206. 8.

Hab. Britain.

9. Prosopis rubicola. B.M.

Hylæus rubicola, *Saund. S. S. Trans. Ent. Soc.* new ser. i. 58.
Hab. Albania.

10. Prosopis versicolor.

Hylæus versicolor, *Saund. S. S. Trans. Ent. Soc.* new ser. i. 58. t. 8. f. 4.
Hab. Albania.

11. Prosopis gibba.

Hylæus gibbus, *Saund. S. S. Trans. Ent. Soc.* new ser. i. 59.
Hab. Albania.

12. Prosopis varipes, n. s. B.M.

Female. Length 1½ line.—Black, head and thorax closely punctured, the antennæ yellow beneath, scape black; a spot on the clypeus touching its apical margin and a triangular spot on each side yellow. Thorax, the collar, tubercles, tegulæ in front, and the basal half of the tibiæ yellow; the tarsi fusco-ferruginous; the metathorax covered with short white pubescence, except the enclosed portion below the post-scutellum, which is deeply rugose. Abdomen short, rounded, smooth and shining. The spots on the face sometimes nearly or quite obsolete.

Male.—Black, the face below the insertion of the antennæ and their scape in front pale yellow; the flagellum orange-yellow beneath. Thorax, the collar, tubercles, tegulæ in front, tibiæ and tarsi bright yellow; a spot on all the tibiæ behind and the apical joints of the tarsi ferruginous; wings hyaline, splendidly iridescent. Abdomen closely and finely punctured.

Hab. Britain.

13. Prosopis propinqua.

Hylæus propinquus, *Nyland. Ap. Boreal. Supp. Act. Soc. Sc. Fenn.* p. 233. 2.
Hab. Finland.

14. Prosopis cornuta.

Hylæus cornutus, *Smith, Trans. Ent. Soc.* iv. 32. 6. t. 3. f. 4; *Zool.* vi. 2204. 5, ♀.
Hylæus plantaris, *Smith, Trans. Ent. Soc.* iv. 32. 7. t. 3. f. 2; *Zool.* vi. 2205. 6, ♂.
Hab. Britain.

15. Prosopis punctulatissima. B.M.

Hylæus punctulatissimus, *Smith, Trans. Ent. Soc.* iv. 33. 8; *Zool.* vi. 2205. 7.

Hab. Britain.

16. Prosopis punctata.

Prosopis punctata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 359. 795. t. 49. f. 12.

Hab. Messina; Morea.

17. Prosopis angulata.

Male. Length 1⅓ line.—Black, strongly punctured; a line on each side of the clypeus continued a little above the insertion of the antennæ; a spot at the base of the clypeus, angular in front, of a yellowish white; the scape and following joint of the antennæ black, the rest pale testaceous beneath. Thorax, the collar, tegulæ in front, tubercles, wings at their extreme base, anterior tibiæ in front, the intermediate and posterior pairs at their base, as well as the basal joint of the tarsi, pale yellow; the wings clear hyaline and beautifully iridescent.

Hab. Portugal.

18. Prosopis variegata. B.M.

Mellinus variegatus, *Fabr. Ent. Syst. Supp.* 265. 1–2.
Prosopis variegata, *Fabr. Syst. Piez.* p. 295. 9.
St. Farg. Hist. Nat. Ins. ii. 534. 1.
Luc. Expéd. Sc. Alger. iii. 223. 169.
Prosopis colorata, *Panz. Faun. Germ.* 89. 14.
Hylæus variegatus, *Smith, Zool.* vi. 2202. 1.

Hab. England; France; Germany; Italy; Algeria.

19. Prosopis bifasciata. B.M.

Prosopis bifasciata, *Jurine, Hym.* p. 220. t. 11. f. 30.
St. Farg. Hym. ii. 536. 2.

This species closely resembles *variegata*, but is very distinct; the sculpture of the thorax is rugulose and shining; the scutellum has deep separate punctures; the wings are clouded at their apex; the anterior tibiæ are only ferruginous towards their base, where there is a minute white spot; all the tarsi are nearly black, the anterior pair being stained at their joints with ferruginous; the abdomen is coarsely punctured, and all the margins of the segments depressed, the depressions smooth and shining, the first and second segments being red. The foregoing description

appears to be of a variety, the insect being usually entirely black.
Hab. Albania; S. France; Italy.

20. Prosopis anthracina, n. s. B.M.

Female. Length 2½ lines.—Entirely black, head and thorax very finely punctured, the apical joints of the antennæ testaceous beneath. Thorax, the tegulæ testaceous, the wings hyaline, the nervures dark testaceous; the enclosed portion of the metathorax longitudinally irregularly sulcate at its base. Abdomen very smooth and shining, beneath it is dark fusco-ferruginous, as well as the legs; the claws ferruginous.

Male.—The clypeus and a space on each side not touching the eyes, forming together an oval, bright yellow; the scape dilated, triangular; the flagellum testaceous beneath. Thorax, the anterior tibiæ in front and the claws testaceous; otherwise as in the other sex.
Hab. Sandwich Islands.

21. Prosopis flavipes, n. s. B.M.

Male. Length 2¼ lines.—Black; the face yellow, the colouring is continued upwards on each side nearly to the vertex of the eyes; the scape cylindrical, black, the rest of the antennæ orange-yellow beneath. Thorax, the metathorax has no distinctly enclosed space, and is subrugose; the wings hyaline, the nervures dark fuscous; all the tibiæ and tarsi bright yellow, the former have a ferruginous stain behind. Abdomen smooth and shining, the margins of the segments narrowly rufo-testaceous.
Hab. Sandwich Islands.

22. Prosopis basalis, n. s. B.M.

Female. Length 3½ lines.—Entirely black, the face thickly covered with elongate punctures, and having a longitudinal smooth furrow a little within the orbits of the eyes and terminating in a line with their vertex. Thorax finely and very closely punctured; at the sides of the post-scutellum and of the metathorax a little white pubescence; the claws bright ferruginous; the wings clear hyaline at their base, fuscous towards their apex; the basal segment of the abdomen very smooth and shining, and having laterally on its apical margin a little fringe of white pubescence.

Male.—The face below the insertion of the antennæ bright yellow, as is also the frontal half of the scape, which is broadly dilated, heart-shaped, and concave beneath; the flagellum inserted exactly in the middle of the scape. Thorax very pu-

bescent, particularly the metathorax; the anterior tibiæ in front, the intermediate and posterior pairs at their base, as well as the basal joints of the tarsi of the latter, yellow; apical joints of the tarsi ferruginous. Abdomen as in the other sex.

Hab. Hudson's Bay. (G. Barnston, Esq.)

23. PROSOPIS AFFINIS, n. s. B.M.

Female. Length 2 lines.—Black, head and thorax closely and strongly punctured; the clypeus has some irregular longitudinal depressions; the face has on each side of the clypeus a triangular yellow spot touching the eyes, the angle of which is at the exact line of the base of the clypeus; the apical joints of the antennæ beneath fulvous. Thorax, the collar, tubercles, tegulæ in front, and all the tibiæ at their base bright yellow. Abdomen ovate, smooth and shining, the sides having a little silvery pile observable in certain lights.

Male.—The face below the insertion of the antennæ yellow; the tubercles, tibiæ at their base and the tarsi yellow; apical joints of the intermediate and posterior pairs ferruginous. Abdomen as in the other sex.

Hab. North America. (E. Doubleday, Esq.)

24. PROSOPIS CONFLUENS, n. s. B.M.

Female. Length 3 lines.—Black, the face on each side of the clypeus yellow, terminating obliquely upwards. Thorax covered entirely with deep punctures, which are confluent; the enclosed space below the post-scutellum rugose; the collar, interrupted in the middle, the tubercles in front, and all the tibiæ at their base, yellow; apical joints of the tarsi rufo-piceous; the base of the wings hyaline, including the first discoidal cell, beyond which they are fuscous. Abdomen oblong-ovate, very smooth and shining, covered, except the basal segment, with a short white pile.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

25. PROSOPIS ELLIPTICA. B.M.

Prosopis elliptica, *Kirby, Faun. Boreal. Amer.* p. 266.

Hab. Hudson's Bay. (G. Barnston, Esq.)

26. PROSOPIS VARIOLOSA, n. s. B.M.

Female. Length 3 lines.—Black, the face yellow on each side of the clypeus, the coloured portion continuing along the margin of the eyes, but not reaching their vertex; down the centre of the clypeus a broad yellow line; the labrum and mandibles ferruginous; the cheeks behind the eyes flat. The thorax covered

with deep punctures, those on the metathorax oblong and placed transversely, interspersed with fine punctures; metathorax truncate, the enclosed portion below the post-scutellum deeply rugose; the sides of the metathorax covered thinly with white pubescence; the collar, tubercles and tegulæ in front, the anterior tibiæ in front, as well as the intermediate and posterior pairs at their base above yellow; the tarsi rufo-piceous. Abdomen conical, highly polished, covered with scattered slightly impressed punctures, except the margins, which are very smooth and shining.

Hab. Santarem, Brazil. (Coll. H. W. Bates, Esq.)

27. Prosopis scutellata.

Prosopis scutellata, *Spin. Ann. Soc. Ent.* 2me sér. i. 506; *Expéd. d'Egypte*, t. 37. f. 26.

Hab. Egypt.

28. Prosopis fulvipes.

Hylæus fulvipes, *Germar, Faun. Ins. Europ.* Fasc. 7. 15 (Halictus?).

Hab. Europe.

29. Prosopis heraldica, n. s. B.M.

Female. Length 3½ lines.—Black, head and thorax strongly punctured, the clypeus, a transverse spot above, and an angulated one on each side reaching a little above the insertion of the antennæ pale yellow; the margin of the clypeus, forming an angular patch on each side, the labrum, mandibles and scape bright ferruginous; the flagellum testaceous beneath. Thorax, the collar yellow, having on each side a ferruginous stain; the tegulæ, tubercles and legs bright ferruginous, the posterior coxæ and femora fusco-ferruginous; the legs have a silvery-white pubescence, particularly on the tarsi above; the thorax on the sides has also a thin clothing of white pubescence. Abdomen, the sides of the basal segment ferruginous, and having on its apical margin a broadly interrupted band of white pubescence; the margins of the second, third, fourth and fifth segments narrowly ferruginous, the sixth entirely so; beneath, the margins broadly piceo-ferruginous.

Hab. Cape of Good Hope.

30. Prosopis picta, n. s. B.M.

Female. Length 3 lines.—Black, the face below the insertion of the antennæ and a little above on each side, as well as the

scape in front, yellow; the flagellum beneath testaceous; the labrum and mandibles ferruginous. Thorax closely punctured; the collar, tubercles, tegulæ in front, scutellum and post-scutellum, as well as the legs, bright yellow; the coxæ, trochanters and apical joints of the tarsi stained with ferruginous; the wings fusco-hyaline, splendidly iridescent. Abdomen finely punctured, the apical margins of the segments broadly testaceous, and having a band of pale yellow pubescence, that on the basal segment broadly interrupted; beneath, the margins are also testaceous.

Male.—Closely resembling the female, but narrower, and having the labrum and mandibles bright yellow.

Hab. Spain and Portugal.

31. Prosopis cyanura. B.M.

Melitta cyanura, *Kirby, Mon. Ap. Angl.* i. 212.

Hab. Swan River.

32. Prosopis similis, n. s. B.M.

Female. Length 3½ lines.—Black, entirely, closely and finely punctured, a large triangular spot on each side of the face, a spot on each side of the collar, the tubercles, scutellum and post-scutellum bright yellow; metathorax opake; thorax beneath coarsely punctured; wing hyaline, the second submarginal cell subquadrate, narrowed towards the marginal. Abdomen a little elongated, obscurely tinged with blue and covered with a changeable white pile, observable in certain lights, the apex thinly covered with black pubescence; beneath, the second segment at the base covered with deep punctures, its apical margin smooth; the second segment finely punctured at the base, more coarsely towards its apical margin; otherwise closely and finely punctured.

Hab. New Holland.

33. Prosopis violacea, n. s. B.M.

Female. Length 3 to 4 lines.—Head and thorax black, closely and rather strongly punctured; the face on each side of the clypeus with a lunate yellow patch reaching a little above the insertion of the antennæ, which are testaceous beneath; the tubercles, a half-circular spot on the scutellum, a smaller similar one on the post-scutellum bright yellow; beneath the latter is the enclosed segment of a circle, the upper portion of which is rugose, the under quite smooth; beneath the enclosed portion the metathorax is transversely striate. Abdomen violet, closely and rather strongly punctured. Wings hyaline, brilliantly iridescent, the

second submarginal cell receiving both recurrent nervures a little within at each extremity.

Male.—Agrees with the female in sculpture, with the following differences in coloration; the face below the insertion of the antennæ entirely yellow, the anterior tibia in front, as well as the basal joint of the tarsi, yellow.

Hab. Swan River.

34. PROSOPIS SULCIFRONS, n. s.

Male. Length 3¼ lines.—Black, closely punctured, clypeus bell-shaped, white, above which is an elevated carina more or less yellow, which terminates opposite the insertion of the antennæ; above, the face is deeply depressed; on each side of the clypeus is a deep sulcation, smooth and shining, which terminates a little above the insertion of the antennæ, sometimes a yellow spot at the apex; the tubercles, a large patch behind the scutellum and post-scutellum bright yellow; wings hyaline, splendidly iridescent, their extreme apex slightly clouded.

Hab. New Holland. (Coll. F. Smith.)

35. PROSOPIS BICOLORATA, n. s.

Female. Length 1½ line.—Black, the face below the insertion of the antennæ and a little above on each side, a line passing a little upwards between them and the antennæ fulvous. Thorax finely punctured; beneath, as well as the legs fulvous; the disk has also a fulvous stain; the tegulæ and extreme base of the wings pale fulvous; wings hyaline, splendidly iridescent; the basal segment of the abdomen bright fulvous-red, the apical segments black.

Hab. Adelaide. (Coll. F. Smith.)

36. PROSOPIS RUFIPES, n. s. B.M.

Female. Length 2½ lines.—Black, head and thorax closely punctured, a minute white lunate spot on each side of the clypeus; the mandibles, labrum, apex of the clypeus and flagellum of the antennæ beneath fulvous. Thorax, a spot on each side of the collar white, the tibiæ and tarsi fulvous. Abdomen, the basal segment and the basal half of the second segment fulvous-red.

Hab. New Holland.

37. PROSOPIS FULVICORNIS, n. s.

Female. Length 2½ lines.—Head and thorax black, the latter coarsely punctured; the face below the insertion of the antennæ

bright yellow; the labrum and scape in front yellow; the mandibles ferruginous; antennæ fulvous. Thorax, the collar on each side, the tubercles and a patch behind uniting, the tegulæ in front, the scutellum and post-scutellum, the anterior femora at their base beneath the tibiæ and tarsi, yellow; the tibiæ have a ferruginous stain behind; the intermediate and posterior tarsi ferruginous; the scutellum is sculptured with large shallow punctures. Abdomen purple or deep blue, closely and finely punctured; the margins of the segments sometimes rufo-piceous, as well as the abdomen beneath.

Hab. Adelaide. (Coll. J. S. Baly, Esq.)

38. Prosopis quadrata, n. s.

Male. Length 3 lines. — Black, face below the antennæ yellow, the antennæ luteous beneath. Thorax as well as the head very closely and finely punctured; the tubercles, scutellum and post-scutellum forming a quadrate patch, yellow; below which is an enclosed space, beautifully and delicately reticulated; wings hyaline, splendidly iridescent; the anterior and intermediate tibia in front, as well as the tarsi of the former, pale ferruginous. Abdomen elongate-ovate, closely punctured; the margins of the two basal segments constricted.

Hab. New Holland. (Coll. J. S. Baly, Esq.)

39. Prosopis bidentata, n. s.

Male. Length 3½ lines.—Black, face below the insertion of the antennæ, and a narrow line between not reaching the anterior stemma, a line along the margin of the eyes, as well as a line behind them, yellow. Thorax opake; the collar, tubercles, the knees of the anterior and intermediate legs, as well as the basal half of the posterior tibia, pale yellow; anterior tibiæ and basal joint of the tarsi ferruginous; wings hyaline, the two recurrent nervures uniting with the nervures of the second submarginal cell. Abdomen punctate, shining; beneath, the third segment is produced into a transverse elevated ridge, having a stout tooth at each extremity.

Hab. New Holland. (Coll. J. S. Baly, Esq.)

40. Prosopis elegans, n. s. B.M.

Female. Length 3½ lines.—Head and thorax black; the face with three broad yellow stripes, terminating in a line with the anterior stemma; the labrum yellow, the mandibles ferruginous; antennæ fusco-ferruginous above, pale beneath, their scape yellow in front. Thorax closely punctured, the scutellum and post-

scutellum, the tegulæ and a broad epaulet over them, the tubercles and legs, bright yellow; the coxæ and trochanters dark ferruginous, the apical joints of the tarsi pale ferruginous. Abdomen red, having a black spot in the centre of the basal segment.

Male. In general colouring agreeing with the other sex, but has the face entirely yellow below the insertion of the antennæ; the epaulet narrow, the post-scutellum black. Abdomen having only the two basal segments and a line down their centre black, the posterior margin of the second black.

Hab. Adelaide.

41. Prosopis ruficeps, n. s. B.M.

Female. Length 3 lines.—Head red, coarsely punctured, the space between the clypeus and the eyes yellow, between the insertion of the antennæ and the stemmata black. Thorax black shining, covered with deep punctures; the collar slightly interrupted, the tubercles and a lunate shape behind them, the scutellum and post-scutellum yellow; the metathorax truncate behind; the anterior tibiæ have a rufous stain in front, the claws rufous. Abdomen of a metallic blue, in certain lights rufopiceous, delicately punctured.

Hab. Adelaide.

42. Prosopis alcyonea. B.M.

Prosopis alcyonea, *Erichs. Wiegm. Arch.* (1842) p. 267. 241.

Hab. Van Diemen's Land.

43. Prosopis vidua, n. s. B.M.

Male. Length 5 lines.—Head and thorax black, the face on each side of the clypeus below the insertion of the antennæ yellow, continued so upwards, gradually attenuating towards the vertex of the eyes, not quite reaching it; from the anterior stemma a channel passes forwards towards the clypeus, in which is sometimes a minute yellow spot; the clypeus on each side, as well as the anterior margin, bordered with black; a transverse yellow line on the labrum; the flagellum of the antennæ testaceous beneath. Thorax strongly punctured, the tubercles yellow; the sides of the metathorax pubescent; above, at the margin of the post-scutellum, produced into a somewhat sharp shining angular point; the first recurrent nervure uniting with the apical nerve of the first submarginal cell, the second recurrent nervure received one-third from the apex of the second submarginal cell, which is also one-third narrower at its radial than at its inferior margin. Abdomen deep blue, having a scattered white pu-

bescence, most dense at the sides; on the apical margin it is black.

This is probably the male of *P. alcyonea* of Erichson.

Hab. New Holland.

44. PROSOPIS MIXTA.

Prosopis mixtus, *Smith, Ann. & Mag. Nat. Hist.* (1851).

Hab. India. (Mus. Hon. East India Company.)

B. *The first recurrent nervure entering the second submarginal cell.*

45. PROSOPIS CONFUSA, n. s. B.M.

Head and thorax black, closely punctured, the punctures on the face elongate, running into grooves at the margin of the clypeus, which is smooth and slightly elevated; the face on each side of the clypeus yellow. Thorax, the tubercles, scutellum and post-scutellum yellow; wings hyaline, slightly clouded towards their apical margins, the second recurrent nervure uniting with the apical one of the second submarginal cell, the first recurrent nervure received a little within the second submarginal cell; beneath, nigro-æneous, coarsely punctured, and thinly covered with short white pubescence, the tibiæ and tarsi clothed with similar pubescence, the claws ferruginous. Abdomen, of a blue green, closely and rather strongly punctured; the margins of the segments violet, smooth and shining; the anterior margin of the basal segment produced in the centre, forming the apex of a shining carina, which runs a short distance down the truncation of the segment; beneath coarsely punctured.

Hab. New Holland.

C. *Both the recurrent nervures entering the second submarginal cell.*

46. PROSOPIS NIGRIFRONS, n. s. B.M.

Female. Length 4 lines.—Black, the clypeus finely aciculate, interspersed with distinct punctures. Thorax strongly punctured, the tubercles and a larger patch behind, the scutellum and post-scutellum yellow; the enclosed space below the post-scutellum has the upper half longitudinally strigose; wings subhyaline, the first recurrent nervure received about one-third from the base of the second submarginal cell, the second nearly at the apex. Abdomen closely punctured, more strongly so towards the apex;

beneath coarsely punctured; the margins of the segments smooth, shining and piceo-ferruginous.

Hab. New Holland.

47. Prosopis impressifrons, n. s. B.M.

Male. Length 4½ lines.—Black, head and thorax strongly punctured, the clypeus and a small angular elevation above, as well as a narrow stripe along the inner orbits of the eyes, bright yellow; a smooth, elongate, deep sulcation on each side of the clypeus; the scape dilated, concave behind; the flagellum fulvous beneath; the mandibles grooved exteriorly, the stemmata placed in a curve. Thorax, the collar slightly interrupted, a spot on the tegulæ in front, the tubercles, a lunate-shaped patch behind, the scutellum and post-scutellum bright yellow; the enclosed space beneath smooth and shining; wings fusco-hyaline; both the recurrent nervures received about one-fourth within the second submarginal cell; beneath very coarsely punctured; anterior tibiæ in front and the claws ferruginous; posterior tibiæ and all the tarsi clothed with short white pubescence. Abdomen, the basal segment finely, the rest much more strongly punctured, all the margins smooth and shining; beneath covered with large elongate scattered punctures.

Hab. New Holland.

48. Prosopis desponsa, n. s. B.M.

Female. Length 4½ lines.—Black, a broad yellow stripe down the centre of the clypeus, on each side of which is a smooth impressed line; above, on each side is a deep depression. Thorax strongly punctured, the collar, tubercles, and a lunate-shaped spot behind the scutellum and a large spot on the post-scutellum, yellow; the enclosed space beneath smooth and shining; wings subhyaline; all the tarsi and posterior tibiæ clothed with white pubescence; claws ferruginous. Abdomen, the basal segment more finely punctured than the rest, and having laterally on its apical margin a small patch of white pubescence, a little scattered white pubescence along the sides of the abdomen, that on the apical segments black; beneath coarsely punctured.

This is probably the female of *P. impressifrons*.

Hab. New Holland.

49. Prosopis nubilosa, n. s. B.M.

Female. Length 3½ lines.—Black, the head more elongate than in *P. nigrifrons*, the clypeus beautifully aciculate, interspersed with elongate punctures, having a spot near the anterior margin and a narrow line along the margins of the eyes, yellow. Thorax

very closely and delicately punctured, the tubercles, scutellum and post-scutellum yellow; the colouring on the scutellum waved at the anterior margin; wings subhyaline; the marginal cell has a narrow fuscous cloud passing along the costal nervure to the apex of the wing; the second submarginal cell quadrate, receiving the first recurrent nervure about one-fourth within, the second at its apex nearly uniting with the apical nervure. Abdomen shining, closely punctured, the basal segment most strongly so.

Hab. Port Philip.

Genus 10. HYLEOIDES.

F. Smith's MSS. (Details, Plate II.)

Head not so wide as the thorax, transverse, subtriangular in front; eyes lateral, elongate-ovate, narrowest at their vertex; the mentum shorter than the labium, which is produced at the apex into elongate lobes rounded at their extremities; the paraglossæ one-third shorter than the labium; labial palpi four-jointed, the basal joint as long as the three following, and having above a number of erect stiff hairs, the apical joint short, cylindrical. The maxillary palpi six-jointed, the basal joint very stout, the two following subclavate, about the same length as the basal joint; the three apical joints of about equal length, and about two-thirds the length of the third joint; the stemmata placed in a triangle on the vertex. Thorax ovate, the superior wings having one marginal cell, one-fourth longer than the first submarginal cell, the extreme apex rounded, and having a short appendiculate nervure; the submarginal cells of about equal length, the second widest at its apex. Abdomen elongate-ovate.

1. HYLEOIDES CONCINNA. B.M.

Vespa concinna, *Fabr. Ent. Syst.* ii. 263. 38; *Cab. Banks. Mus. Linn. Soc. Syst. Piez.* p. 259. 30.

Hab. New Holland; Port Philip.

2. HYLEOIDES ZONALIS, n. s. B.M.

Female. Length 5½ lines.—Black, the clypeus finely aciculate, and having a central yellow stripe, broadest at the base; mandibles very broad at the base, forcipate, deeply grooved exteriorly, bidentate at the apex, apical tooth rounded; antennæ subclavate, stemmata placed in a triangle on the vertex; on each side, close to the margin of the eyes, a smooth impressed line. Thorax oval, the collar slightly interrupted in the middle, the

tubercles and two ovate spots on the scutellum yellow; the superior wings have a dark fuscous cloud on their anterior margin, extending from base to apex, the width of the marginal and second submarginal cells, a little palest towards the base of the wings; legs ferruginous, anterior pair darkest; the anterior tibiæ at their apex furnished exteriorly with a stout bent tooth rather more than one-third the length of the basal joint of the tarsi; the tarsi densely ciliated; the intermediate and posterior legs have a silvery-white pubescence, most dense on the tarsi and on the posterior femora and tibiæ within. Abdomen, the apical margin of the basal segment has a broad yellow band, dilated laterally; a similar band, continued beneath, occupies the third segment a little before its apical margin; beneath, the second segment is produced at its base into a conical tubercle.

Hab. New Holland (Hunter River).

Genus 11. MEROGLOSSA.

F. Smith's MSS. (Details, Plate II.)

Head transverse, face elongate; ocelli placed in a slight curve on the vertex. Antennæ filiform in the male, 13-jointed, the seventh joint more slender than the others. Mentum elongate-conic, about thrice the length of the labium; the labium lanceolate, of about the same length as the paraglossæ, which are broad, and as well as the labium very pubescent. Maxillary palpi six-jointed. Thorax ovate, superior wings having one marginal cell acuminate at its apex; submarginal cells two, the first twice the length of the second, the second receiving both the recurrent nervures. Abdomen elongate-ovate.

1. Meroglossa canaliculata, n. s. B.M.

Male. Length 4½ lines.—Black, ocelli large and prominent, the face deeply canaliculate, smooth and shining; the canaliculation occupying the whole of the face above the insertion of the antennæ and extending on each side of the clypeus nearly to its anterior margin; a raised yellow line traverses the inner orbits of the eyes; the clypeus yellow, angular above; the labrum, mandibles and antennæ ferruginous, the scape broadly dilated, yellow in front. Thorax, the prothorax slightly elongated, the collar narrowly yellow, the disk strongly punctured; the metathorax rounded and covered with griseous pubescence; the tegulæ have a minute white dot in front, and are, as well as the nervures of the wings, rufo-piceous; the legs rufo-piceous; the anterior tibia piceous in front. Abdomen cylindrical, closely

punctured, covered sparingly with hoary pubescence, particularly at the sides.

Hab. Port Essington.

Subfam. 2. ACUTILINGUES.

Acutilingues, *Westw. Int. Class. Ins. Gen. Syn.* p. 84.

Genus 12. SPHECODES.

(Details, Plate III.)

Sphex, pt., *Linn. Syst. Nat.* i. 941, 1766.
Apis, pt., *Christ. Hym.* p. 153, 1791.
Nomada, pt., *Fabr. Ent. Syst.* ii. 345, 1793.
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 137, ** *a*, 1802.
Sphecodes, *Latr. Hist. Nat.* xiii. 368, 1805.

1. SPHECODES GIBBUS. B.M.

Sphex gibba, *Linn. Syst. Nat.* i. 946. 33, & *Cab. Mus. Linn. Soc.* ♀.
Rossi, Faun. Etrus. ii. 63. 816.
Fabr. Ent. Syst. ii. 212. 59.
Apis rufa, *Christ. Hym.* p. 201. t. 17. f. 12, ♀.
Melitta sphecoides, *Kirby, Mon. Ap. Angl.* ii. 46. 9, ♀.
Melitta monilicornis, *Kirby, Mon. Ap. Angl.* ii. 47. 10 ♂, & t. 15. f. 6.
Melitta picea, *Kirby, Mon. Ap. Angl.* ii. 48. 11, ♂ var.
Sphecodes piceus, *Wesm. Obs.*
Sphecodes gibbus, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 193. 2.
Sphecodes sphecoides, *Smith, Zool.* iii. 1013. 2. f. 34.
Hab. Europe.

2. SPHECODES RUFESCENS. B.M.

Apis rufescens, *Fourc. Ent. Par.* ii. 447. 17.
Apis gibba, *Christ. Hym.* p. 183. t. 15. f. 3.
Nomada gibba, *Fabr. Ent. Syst.* ii. 348. 12, & *Cab. Banks. Mus. Linn. Soc.*
Melitta gibba, *Kirby, Mon. Ap. Angl.* ii. 42. 7.
Sphecodes gibbus, *Latr. Hist. Nat.* xiii. 368.
St. Farg. Hist. Nat. Ins. ii. 542. 3. t. 24. f. 1 ♀, 2 ♂.
Smith, Zool. iii. 1012. 1.
Sphecodes pellucidus, *Smith, Zool.* iii. 1014. 3, ♂ ♀, var. — ?
Reaum. Mem. vi. 96. t. 9. f. 4. 7.
Proabeille noire et rousse, *De Geer*, ii. 7. 55. t. 32. f. 6.
Hab. Europe.

3. Sphecodes subquadratus. B.M.

Sphecodes gibbus, *Wesm. Obs.*
Sphecodes subquadratus, *Smith, Zool.* iii. 1014. 5, ♂ ♀.
Hab. Charlton, Kent, and Camberwell.

4. Sphecodes ephippia.

Sphex ephippia, *Linn. Syst. Nat.* i. 944. 22, *fide Cab. Mus. Linn. Soc.* ♂.
Apis fulviventris, *Scop. Ent. Carn.* 807, ♀ ?
Schrank, Ins. Aust. 822.
Apicis minimus, *Harris, Expos.* p. 136. t. 39. f. 21.
Melitta divisa, *Kirby, Mon. Ap. Angl.* ii. 49. 12, ♂.
Sphecodes divisus, *Smith, Zool.* iii. 1015. 6, ♂ ♀.
Andrena Potentilla, *Panz. Faun. Germ.* 46. 14.
Apis nigra, abdomine rufo nitida, incisuris nigris, *Geoff. Ins. Par.* ii. 416. 18.
Hab. Europe.

5. Sphecodes Geoffrellus. B.M.

Melitta Geoffrella, *Kirby, Mon. Ap. Angl.* ii. 45. 8, ♀, & t. 15. f. 5, ♀.
Sphecodes Geoffrellus, *Wesm. Obs.* vii. 3.
St. Farg. Hist. Nat. Ins. ii. 544. 4.
Nyland. Act. Soc. Sc. Fenn. p. 194. 3.
Smith, Zool. iii. 1014. 5, ♂ ♀.
Sphecodes maculatus, *St. Farg. Hist. Nat. Ins.* ii. 545. ♂ var.
Hab. Britain.

6. Sphecodes fuscipennis.

Dichroa fuscipennis, *Germ. Faun. Ins. Europ.* fasc. 5. t. 18.
Sphecodes Latreillii, *Wesm. Obs.*
Sphecodes nigripes, *St. Farg. Hym.* ii. 542. 2.
Luc. Expéd. Sc. Alger. iii. 222. 168.
Sphecodes rugosa, *Smith, Zool.* vi. 2208.
Apis rufa, *Sulz. Hist. Ins.* p. 198. t. 27. f. 14?
Hab. England; France; Germany; Greece.

7. Sphecodes collaris.

Sphecodes collaris, *Spin. Ann. Soc. Ent. Fr.* 2me sér. i. 137. 26.
Hab. Spain.

8. Sphecodes semi-æneus.

Sphecodes semi-æneus, *Brullé, Hist. Nat. Il. Canar.* ii. 88. 36.
Hab. Canary Islands.

9. Sphecodes alternatus, n. s.

Female. Length 4 lines.—Head and thorax black; sides of the face below the antennæ covered with silvery-white pubescence, mandibles in middle ferruginous; the head shining and strongly punctured. Thorax shining, the punctures scattered on the disk; metathorax truncate, above rugose; the outer margins of the tegulæ pale testaceous; wings fusco-hyaline, their apical margins darkest; the first recurrent nervure received in the middle of the second submarginal cell; all the tibiæ and tarsi ferruginous, the tibiæ having a fuscous stain behind. Abdomen shining red, the extreme base impunctate, becoming gradually closely punctured at the apical margin of the basal segment; the following segments each in succession more closely and much more finely punctured.

Resembling *S. Africanus*, but in that species the first recurrent nervure is received at the extreme apex of the second submarginal cell.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

10. Sphecodes fumipennis, n. s.

Female. Length 5 lines.—Head and thorax black, the face on each side of the clypeus clothed with white pubescence; the mandibles dark ferruginous, antennæ rufo-piceous beneath; the puncturing on the vertex very deep and close, on the disk of the thorax the punctures are large and confluent; the metathorax truncate, the sides and upper portion coarsely rugose; wings dark fuscous; legs fusco-ferruginous, the tibiæ and tarsi clothed with silvery-white pubescence. Abdomen covered with large distant punctures, the apical margin of the basal segment constricted, the following depressed, smooth and shining.

Hab. N. India. (Coll. J. S. Baly, Esq.)

11. Sphecodes apicatus, n. s.

Female. Length 4 lines.—Head and thorax black, the former strongly and closely punctured, the face covered with white pubescence, most sparing on the clypeus. Thorax, the disk very smooth and shining, having a few large distant punctures; metathorax coarsely rugose; wings fusco-hyaline, their apical margins darkly clouded; apical joints of the tarsi ferruginous; all

the tarsi and the intermediate and posterior tibiæ covered with silvery pubescence. Abdomen red, the apical segment black, punctures fine and distant.

Hab. India. (Coll. J. S. Baly, Esq.)

12. Sphecodes rufipes, n. s. B.M.

Female. Length 3½ lines.—Head and thorax black, their pubescence black; mandibles ferruginous. Thorax strongly punctured, the tegulæ rufo-piceous, the wings fusco-hyaline, all the tibiæ and tarsi bright ferruginous, their pubescence white; that on the femora is black. Abdomen red, smooth and shining, the basal margins sparingly punctured; the apex clothed with fuscous pubescence.

Male.—Closely resembles the female; head rather wider than the thorax, the face covered with white pubescence, the antennæ moniliform. Abdomen elongate-ovate, closely and distinctly punctured.

Hab. Algeria.

13. Sphecodes rubripes.

Sphecodes rubripes, *Spin. Ann. Soc. Ent. Fr.* vii. 512. 58.

Hab. Egypt.

14. Sphecodes hispanicus.

Sphecodes hispanicus, *Wesm. Ann. Soc. Ent. Fr.* iv.; *Bull. Ent.* lxvii. 67. 6.

Spin. Ann. Soc. Ent. Fr. vii. 513. 59.

Hab. Egypt; South of France.

15. Sphecodes antipodes, n. s.

Female. Length 3¼ lines.—Head and thorax black, closely and strongly punctured; mandibles deeply grooved exteriorly, their apex broad and ferruginous; the stemmata placed in a curve on the vertex; the flagellum of the antennæ nigro-piceous beneath. Thorax, the upper portion of the metathorax grooved longitudinally; beneath the post-scutellum is a half-circular space enclosed by an elevated carina; thence to its base truncated, the sides of the truncation produced into two pointed tubercles; wings fusco-hyaline, palest towards their base; the posterior legs clothed with silvery white pubescence, particularly within; apical joints of the tarsi ferruginous. Abdomen red, shining, distinctly but sparingly punctured; the base black, the margins

of the segments more or less nigro-piceous; beneath, the margins of the segments fringed with pale hairs.

Hab. Sydney. (Coll. F. Smith.)

16. Sphecodes dichroa. B.M.

Sphecodes dichroa, *Harris's Catalogue.*

Female. Length 4½ lines.—Head and thorax black, strongly punctured; on the disk of the thorax, which is shining, the punctures are more distant, as also on the clypeus; tegulæ rufo-piceous, the nervures dark ferruginous; wings hyaline, having a fuscous cloud at their apex; the metathorax truncate, the enclosed space below the post-scutellum rugged, as well as the sides beyond, the truncation not so coarsely rugose. Abdomen entirely red, strongly punctured, the margins of the segments depressed, apical segment rufo-testaceous; beneath more strongly but not so closely punctured.

Male.—Closely resembling the female, but more coarsely sculptured and more pubescent; the antennæ submoniliform; the margins of the abdominal segments very smooth and shining.

Hab. United States. (E. Doubleday, Esq.)

Genus 13. TEMNOSOMA.

F. Smith's MSS. (Details, Plate II.)

Head subquadrate, as wide as the thorax, stemmata placed in a triangle on the vertex, the posterior pair on a line with the vertex of the eyes; eyes lateral, elongate-ovate; antennæ filiform. Mentum elongate, labium short, narrow and acuminate, paraglossæ broader than the labium, a little shorter, and pointed at their apex; labial palpi four-jointed. Maxillary palpi six-jointed, the apical lobe short and rounded, the palpi twice the length of the lobe; the joints about equal in length. Thorax ovate, rounded posteriorly, anterior wings having one marginal and three submarginal cells; the marginal cell equal in length to the three submarginals, wide at the base and gradually narrowing towards the apex; the first submarginal cell longer than the second and third, the second very narrow, the transverse nervures in the males nearly coalescing, the third narrowed towards the marginal.

1. Temnosoma metallicum, n. s. B.M.

Female. Length 3 lines.—Metallic green, head strongly punctured; antennæ labrum and mandibles black, the latter ferruginous at their apex; the clypeus prominent. Thorax strongly

but distantly punctured on the disk; metathorax rounded and having a deep longitudinal channel; beneath the post-scutellum is a row of radiating sulcations, beyond which is a space transversely strigose, the remaining portion covered with deep punctures; wings hyaline, splendidly iridescent, slightly clouded at their apical margins; the tarsi rufo-piceous. Abdomen, the margins of the two basal segments much depressed, that of the third moderately so; all the margins above and beneath smooth and shining, the abdomen otherwise covered with large deep punctures; margins of the segments beneath nigro-piceous.

Male.—Corresponds with the female, the abdomen being less deeply punctured.

Hab. ♀ Para. ♂ Jamaica? (H. W. Bates, Esq.)

Genus 14. PARASPHECODES.

F. Smith's MSS. (Details, Plate III.)

The species of this subdivision closely resemble in general appearance those of the genus *Sphecodes*, but the females possess the characteristic anal rima and also the appendage to the labrum of the females of the genus *Halictus*; the males also have an elongate cylindrical abdomen, and have the clypeus produced and yellow at the apex, as is usual in the same genus; the tongue offers no positive distinction from some of the species of *Halictus*, which differ in having that organ more or less elongate and acute, but the superior wings have always the first recurrent nervure united to the second transverso-cubital nervure. All the species are from Australia and Van Diemen's Land.

1. PARASPHECODES HILACTUS, n. s. B.M.

Male. Length 4 to 4¼ lines.—Head and thorax black, the clypeus moderately produced, yellow at the apex, antennæ as long as the head and thorax. Thorax strongly and closely punctured, the base of the metathorax enclosed by a sharp arched elevation which is more or less waved on each side and forming a point in the centre, the enclosure deeply rugose-striate, slightly radiating; tegulæ rufo-testaceous, wings slightly rufo-hyaline, iridescent and faintly clouded at their apex, nervures ferruginous; legs red, or sometimes rufo-testaceous. Abdomen elongate, closely and finely punctured, the fourth and following segments black, margins of the three basal ones fuscous.

Hab. Swan River; Adelaide.

2. PARASPHECODES HILTACUS, n. s. B.M.

Female. Length 3½ lines.—Head and thorax black, opake, thinly covered with hoary pubescence, most dense on the sides

of the metathorax, both very finely and very closely punctured; the base of the metathorax enclosed by a raised, smooth ridge behind, the enclosure has a series of radiating striæ; metathorax behind smooth and shining; tegulæ rufo-testaceous; wings hyaline, iridescent, clouded at their apex; legs black or dark rufo-testaceous, their pubescence above fuscous, beneath of a changeable silvery brightness. Abdomen red, very finely punctured, the base and sides have a hoary pubescence.

Hab. New Holland.

3. Paraspheodes Sulthica, n. s. B.M.

Male. Length 3¾ lines.—Head and thorax black, apex of the clypeus yellow, the face covered with fulvous pubescence, the antennæ longer by one-third than the head and thorax; the latter finely and very closely punctured, the base of the metathorax enclosed by an arched ridge, the enclosure rugose-striate, sides of the metathorax as coarsely sculptured as the enclosed space; the thorax thinly covered with fulvous pubescence, most dense on the sides of the metathorax; tibiæ and tarsi ferruginous, the posterior tibiæ more or less stained outside; tegulæ pale rufo-testaceous; wings hyaline, faintly clouded at their apex, iridescent, the nervures ferruginous. Abdomen elongate, red, slightly fuscous at the apex, very finely and closely punctured.

Hab. New Holland.

4. Paraspheodes Lacthius, n. s. B.M.

Female. Length 4 lines.—Head and thorax black, very finely and closely punctured, opake; clypeus shining, having scattered deep punctures; flagellum fulvo-testaceous beneath. Thorax, the base of the metathorax not distinctly enclosed, irregularly longitudinally rugose; tegulæ rufo-testaceous; wings slightly fulvo-hyaline, iridescent, very slightly clouded at their apical margins; legs rufo-testaceous. Abdomen ovate, red, the basal segment more or less fuscous at the base, the fourth and following segments fuscous, thinly covered with a short hoary pubescence.

Hab. New Holland.

5. Paraspheodes Lichatus, n. s. B.M.

Female. Length 5 lines.—Head and thorax black, the clypeus produced, shining, strongly punctured, slightly impressed longitudinally. Thorax strongly and very closely punctured, the base of the metathorax enclosed by a sharp ridge or carina,

straight behind, from which it is continued on each side obliquely to the post-scutellum, which is densely covered with hoary pubescence, as well as the whole thorax on the sides and beneath; the legs beneath fringed with hoary pubescence, tinged with yellow in certain lights, on the tibiæ above it is fuscous; wings subhyaline, their apex clouded, the nervures dark fusco-ferruginous. Abdomen ovate, red, closely and very finely punctured, the fourth and following segments black.

Hab. Western Australia.

6. Parasphecodes Tuchilas, n. s. B.M.

Female. Length 4 lines.—Head and thorax black, clypeus shining and strongly punctured; the disk of the thorax strongly and very closely punctured, the base of the metathorax enclosed by a sharp curved elevated ridge, the enclosure longitudinally rugose; sides of the metathorax and the whole of the thorax beneath thinly covered with hoary pubescence; on the tibiæ above fuscous, in certain lights having a silvery brilliancy. Abdomen elongate-ovate, red, finely and not very closely punctured, the extreme base black, as well as the fourth and following segments, beneath coarsely punctured.

Hab. New Holland.

7. Parasphecodes Tilachus, n. s. B.M.

Female. Length 4½ lines.—Head and thorax black, the clypeus produced, and having a number of large deep somewhat elongate punctures; the face has a little scattered yellow pubescence, the flagellum obscurely testaceous towards the apex; thorax coarsely punctured; base of the metathorax enclosed by a smooth ridge, the enclosure concave and roughly striated, the irregular striation slightly radiating; wings subhyaline, fusco-ferruginous, nervures ferruginous; the legs, and thorax on its sides and beneath have a pale fulvous pubescence. Abdomen red, the base rather strongly punctured, the fourth and following segments black.

Hab. Van Diemen's Land.

8. Parasphecodes Lithusca, n. s.

Female. Length 3½–4 lines.—Head and thorax black, the clypeus not produced, shining, and having large scattered punctures, the head very closely punctured, the flagellum nigro-piceous beneath. Thorax, the disk shining, finely and distantly punctured, the base of the metathorax not enclosed, but finely roughened and opake; wings ferrugineo-hyaline, iridescent and clouded at their apex; legs rufo-testaceous, the tibiæ and tarsi

palest, their pubescence fulvous. Abdomen red, the extreme base black, apex slightly fuscous, the anal rima ferruginous.

Hab. Van Diemen's Land.

9. Parasphecodes Talchius.

Male. Length 4 lines.—Head and thorax black, apex of the clypeus yellow; the face thickly covered with yellow pubescence; antennæ as long as the head and thorax, the latter closely punctured; the base of the metathorax enclosed by an arched ridge, the enclosure coarsely rugose; legs black, the tibiæ and tarsi more or less rufo-piceous; wings subhyaline, clouded at their apex. Abdomen very closely and finely punctured, black at the base, the apex more or less fuscous, basal margins of the second and third segments depressed.

Hab. Van Diemen's Land.

10. Parasphecodes Stuchila, n. s.

Male. Length 4 lines.—Head and thorax black, antennæ as long as the head and thorax, the apex of the clypeus and the labrum yellow. Thorax very minutely punctured; the base of the metathorax enclosed by an arched elevated ridge, the enclosure finely reticulate; wings subhyaline, their apex clouded; the tibiæ, tarsi and posterior femora above ferruginous. Abdomen ferruginous, the basal half of the first segment black, slightly fuscous; basal margins of the second and third segments depressed.

Var. Legs and abdomen black, the claw-joint of the tarsi alone ferruginous. Abdomen black, tibiæ and tarsi testaceo-ferruginous.

Hab. Van Diemen's Land.

11. Parasphecodes Altichus, n. s.

Male. Length 4½ lines.—Head and thorax black, antennæ as long as the head and thorax, the face covered with ochraceous pubescence, the apex of the clypeus yellow, which in the centre is produced upward in an angular shape; margin of the clypeus, the labrum and mandibles dark ferruginous, the flagellum fulvous beneath. Thorax, the disk closely and strongly punctured; at the base of the metathorax is an enclosed space coarsely rugose; the sides of the truncation have a raised carina, the sides of the metathorax covered with ochraceous pubescence thinly scattered over the whole thorax beneath; wings subhyaline, nervures ferruginous; the apex of the wings fuscous; legs black, claw-joint of the tarsi ferruginous. Abdomen elongate-ovate, closely and finely punctured, most strongly at the base; the third segment

more or less in the middle and the whole of the following segments black.

Hab. Van Diemen's Land.

12. Parasphecodes Taluchis, n. s.

Female. Length 3 lines.—Head and thorax black, the clypeus slightly produced and roughly punctured at the apex, flagellum rufo-testaceous towards the apex. Thorax very finely and closely punctured; the base of the metathorax enclosed by a sharp arched ridge, the enclosure strongly longitudinally rugose; tegulæ rufo-testaceous; wings rufo-hyaline, beautifully iridescent, their nervures ferruginous; legs dark rufo-testaceous, the tarsi palest. Abdomen red, slightly fuscous towards the apex.

Hab. Van Diemen's Land.

Genus 15. HALICTUS.

(Details, Plate II.)

Apis, pt., *Linn. Syst. Nat.* i. 953, 1766.
Hylæus, pt., *Fab. Syst. Ent.* ii. 302, 1793.
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 138, ** *b*, 1802.
Prosopis, pt., *Fab. Syst. Piez.* p. 293, 1804.
Megilla, pt., *Fab. Syst. Piez.* p. 328, 1804.
Halictus, *Latr. Hist. Nat.* xiii. 364, 1805.
Lasioglossum, *Curtis, Brit. Ent.* x. 418, 1834.

1. Halictus quadristrigatus. B.M.

Halictus quadristrigatus, *Latr. Hist. Nat. Crust. Ins.* xiii. 365. 1; *Gen. Crust. Ins.* iv. 154.
St. Farg. Hym. ii. 265. 1.
Brullé, Expéd. Sc. Morée, iii. 348. 768.
Luc. Expl. Sc. Alger. iii. 182. 91.
Nyland. Revis. Ap. Boreal. p. 237. 1.
Hylæus grandis, *Illig. Mag. für Ins. Kund.* v. 57. 29.
Schæff. Icon. Ins. Ratisb. t. 32. f. 19, ♂.
Andrena quadristrigata, *Spin. Ins. Lig.* fasc. 1. p. 123. 11, male.
Halictus ecaphosus, *Walck. Mém. Halict.* p. 58. t. 1. f. 1, *a–e.*

Hab. France; Italy; Germany; Belgium; Algeria.

2. Halictus sexcinctus. B.M.

Apis sexcincta, *Fab. Syst. Ent.* ii. 387. 54; *Sp. Ins.* p. 485. 73; *Mantiss.* i. 305. 84.
Hylæus sexcinctus, *Fab. Ent. Syst.* ii. 304. 6, ♂; *Syst. Piez.* p. 320. 4,

Hylæus arbustorum, *Panz. Faun. Germ.* 46. t. 14.
Halictus 6-cinctus, *Latr. Hist. Nat. Crust. Ins.* xiii. 366. 2.
Walcken. Mém. Halict. p. 66.
St. Farg. Hym. ii. 268. 4.
Nyland. Revis. Ap. Boreal. p. 237. 2.
Andrena sexcincta, *Walcken. Faun. Paris.* ii. 108. 25.
Hab. France; Italy; Germany; Greece; Spain; Polish Ukraine.

3. Halictus zebrus. B.M.

Apis scabiosa, *Rossi, Faun. Etrus.* ii. 105. 916, ♂ ?
Halictus zebrus, *Walck. Mém. Halict.* p. 68.
St. Farg. Hym. ii. 266. 3.
Halictus scabiosæ, *Brullé, Hist. Nat. Il. Canar.* ii. 87. 30.
Hab. France; Germany; Italy; Syria; Canary Islands.

4. Halictus quadricinctus. B.M.

Apis quadricincta, *Fab. Mantiss.* i. 305. 85.
Hylæus quadricinctus, *Fab. Ent. Syst.* ii. 303. 3, ♂.
Melitta quadricincta, *Kirby, Mon. Ap. Angl.* ii. 51. 13.
Halictus quadricinctus, *Nyland. Apum Boreal. Act. Soc. Sc. Fenn.* p. 189. 1; *Revis. Ap. Boreal.* p. 241. 10.
Smith, Zool. vi. 2040. 1.
Hab. Britain; France; Italy; Germany; Sweden; Canary Islands.

5. Halictus xanthopus. B.M.

Melitta xanthopus, *Kirby, Mon. Ap. Angl.* ii. 78. 34, ♂ ♀.
Lasioglossum tricingulum, *Curtis, Brit. Ent.* x. t. 418, ♂.
Halictus xanthopus, *Brullé, Exp. de Morée,* iii. 349. 769.
St. Farg. Hym. ii. 273. 10, ♂ ♀.
Smith, Zool. vi. 2173. 25.
Nyland. Revis. Apum Boreal. p. 238. 3.
Hab. Britain; France.

6. Halictus lugubris. B.M.

Melitta lugubris, *Kirby, Mon. Ap. Angl.* ii. 31. 86, ♂.
Melitta lævigata, *Kirby, Mon. Ap. Angl.* ii. 75. 32, ♀.
Halictus fodiens, *Latr. Hist. Nat. Crust. Ins.* xiii. 367. 3.
Halictus lævigatus, *Nyland. Revis. Apum Boreal.* p. 239. 4.
St. Farg. Hist. Nat. Ins. ii. 274. 12, ♀.
Halictus lugubris, *Smith, Zool.* vi. 2169. 19, ♂ ♀.
Hab. Britain; France; Dalmatia.

7. HALICTUS SEXNOTATUS. B.M.

Melitta sexnotata, *Kirby, Mon. Ap. Angl.* ii. 82. 37. t. 15. f. 7, 8, ♂ ♀.
Halictus sexnotatus, *Walcken. Mém. Halict.* p. 72.
St. Farg. Hist. Nat. Ins. ii. 273. 11.
Smith, Zool. vi. 2174. 26.
Nyland. Revis. Apum Boreal. p. 239. 5.
Hab. Britain; France; Belgium; Jersey; Sweden.

8. HALICTUS QUADRINOTATUS. B.M.

Melitta quadrinotata, *Kirby, Mon. Ap. Angl.* ii. 79. 35, ♂ ♀.
Halictus quadrinotatus, *Brullé, Exp. de Morée*, iii. 350. 773.
Smith, Zool. vi. 2173. 24.
Nyland. Revis. Apum Boreal. p. 240. 6.
Hab. Britain; France; Belgium; Denmark.

9. HALICTUS MACULATUS. B.M.

Halictus maculatus, *Smith, Zool.* vi. 2172. 23, ♀.
Nyland. Revis. Apum Boreal. p. 241. 11.
Hab. Britain; France.

10. HALICTUS INTERRUPTUS. B.M.

Hylæus interruptus, *Panz. Faun. Germ.* 55. 4.
Halictus interruptus, *St. Farg. Hym.* ii. 288. 32.
Smith, Zool. vi. 2167. 16.
Hab. Britain; France; Germany; Italy; Portugal.

11. HALICTUS ELEGANS. B.M.

Halictus elegans, *St. Farg. Hym.* ii. 286. 29.
Hab. South of France; Italy.

12. HALICTUS PRASINUS.

Halictus prasinus, *Smith, Zool.* vi. 2169. 18.
Nyland. Revis. Apum Boreal. p. 242. 12.
Hab. Britain; France.

13. HALICTUS ABDOMINALIS. B.M.

Hylæus abdominalis, *Panz. Faun. Germ.* 53. 18, ♂.
Melitta abdominalis, *Kirby, Mon. Ap. Angl.* ii. 73. 30, ♂ var.
Melitta fulvocincta, *Kirby, Mon. Ap. Angl.* ii. 68. 28, ♀.
Melitta malachura, *Kirby, Mon. Ap. Angl.* ii. 67. 26, ♀.
Andrena vulpina, *Fab. Syst. Piez.* p. 326. 19, ♀?
Panz. Faun. Germ. 97. 18, ♀.

Halictus terebrator, *Walcken. Mém. Halict.* p. 72, ♂ ♀.
Halictus vulpinus, *St. Farg. Hym.* ii. 276. 15.
Luc. Expl. Sc. Alger. p. 185. 96.
Halictus fulvocinctus, *Nyland. Act. Soc. Sc. Fenn.* p. 199. 4; *Revis. Apum Boreal.* p. 242. 13.
Halictus abdominalis, *Smith, Zool.* vi. 2106. 15.
Halictus malachurus, *Kirby's Copy, Mon. Apum Angl.* note.
Smith, Zool. vi. 2106. 14, var.
Nyland. Revis. Apum Angl. p. 244. 16.

Hab. Britain; France; Germany; Italy; Belgium; Portugal; Algeria; S. Africa; Finland; Lapland; Polish Ukraine; Nova Scotia.

14. HALICTUS FULVIPES. B.M.

Hylæus fulvipes, (*Klug*) *Germar, Faun. Ins. Europ.* fasc. 7. t. 15.

Hab. Germany.

15. HALICTUS VULPINUS.

Halictus vulpinus, *Nyland. Revis. Apum Boreal.* p. 243. 14.

Hab. France.

16. HALICTUS ALBIPES. B.M.

Apis albipes, *Fab. Mant. Ins.* i. 306. 92, ♂.
Panz. Faun. Germ. 7. 15.
Hylæus albipes, *Fab. Ent. Syst.* ii. 306, ♂.
Melitta albipes, *Kirby, Mon. Ap. Angl.* ii. 71. 29, ♂.
Melitta obovata, *Kirby, Mon. Ap. Angl.* ii. 75. 31, ♀.
Prosopis albipes, *Fab. Syst. Piez.* p. 294. 4, ♂.
Halictus albipes, *St. Farg. Hym.* ii. 287. 31, ♂.
Smith, Zool. vi. 2167. 17, ♂ ♀.
Nyland. Revis. Apum Boreal. p. 244. 15.
Halictus fulvocinctus, *Nyland. Act. Soc. Sc. Fenn.* p. 199. 4, ♂ var.

Hab. Britain; France; Germany; Portugal.

17. HALICTUS SUBFASCIATUS. B.M.

Halictus subfasciatus, *Nyland. Apum Boreal. Act. Soc. Sc. Fenn.* i. 200. 5; *Revis. Apum Boreal.* p. 245. 17.

Hab. North of England; Sweden; Finland.

18. HALICTUS LONGULUS. B.M.

Halictus longulus, *Smith, Zool.* vi. 2104. 11, ♀.

Hab. Britain; Italy.

19. Halictus lævis.

Melitta lævis, *Kirby, Mon. Ap. Angl.* ii. 65. 24, & *Cab. Mus. Ent. Soc.*
Halictus lævis, *St. Farg. Hym.* ii. 277. 16.
Smith, Zool. vi. 2104. 12, ♀.
Nyland. Revis. Apum Boreal. p. 245. 18.
Hab. Britain; France.

20. Halictus rufitarsis.

Halictus rufitarsis, *Zett. Ins. Lapp.* p. 462. 3.
Nyland. Apum Boreal. Act. Soc. Sc. Fenn. i. 201. 6.
Hab. France; Lapland; Finland.

21. Halictus minutissimus. B.M.

Melitta minutissima, *Kirby, Mon. Ap. Angl.* ii. 63. 22, ♂ ♀.
Halictus minutissimus, *Smith, Zool.* vi. 2103. 9.
Nyland. Revis. Apum Boreal. p. 246. 20.
Hab. Britain; France; Belgium.

22. Halictus nitidiusculus. B.M.

Melitta nitidiuscula, *Kirby, Mon. Ap. Angl.* ii. 64. 23, ♂.
Halictus nitidiusculus, *Smith, Zool.* vi. 2103. 10, ♂ ♀.
Nyland. Revis. Apum Boreal. p. 246. 21.
Hab. Britain; Denmark; Sweden; Italy; Algeria.

23. Halictus minutus. B.M.

Melitta minuta, *Kirby, Mon. Ap. Angl.* ii. 61. 20, ♂ ♀.
Halictus minutus, *St. Farg. Hym.* ii. 227. 17, ♂ ♀.
Nyland. Apum Boreal. Act. Soc. Sc. Fenn. p. 202. 7; *Revis. Apum Boreal.* p. 246.
Smith, Zool. vi. 2102. 8.
Hab. Britain; France; Denmark; Finland.

24. Halictus villosulus. B.M.

Melitta villosula, *Kirby, Mon. Ap. Angl.* ii. 62. 21, ♂.
Melitta punctulata, *Kirby, Mon. Ap. Angl.* ii. 66. 25, ♀.
Halictus villosulus, *Smith, Zool.* vi. 2105. 13, ♂ ♀.
Nyland. Revis. Apum Boreal. p. 246. 22.
Hab. Britain; France.

25. Halictus leucopus. B.M.

Melitta leucopus, *Kirby, Mon. Ap. Angl.* ii. 59. 18, ♂.
Halictus leucopus, *Nyland. Act. Soc. Sc. Fenn.* p. 205. 10; *Revis. Ap. Boreal.* p. 247. 23.
Smith, Zool. vi. 2100. 5.
Hab. Britain; France; Finland.

26. Halictus Smeathmanellus. B.M.

Melitta Smeathmanella, *Kirby, Mon. Ap. Angl. App.* ii. 375. 111.
Halictus Smeathmanellus, *Smith, Zool.* vi. 2101. 7.
Hab. Britain; France; Denmark; Belgium.

27. Halictus parvulus. B.M.

Apis parvula, *Fab. Ent. Syst. Supp.* p. 277. 123–4.
Megilla parvula, *Fab. Syst. Piez.* p. 334. 32.
Andrena pulchella, *Jurine, Hymenopt.* t. 11. gen. 32.
Andrena parvula, *Spin. Ins. Lig.* fasc. 3. p. 193. 21.
Hab. South of France; Italy; Greece.

28. Halictus flavipes. B.M.

Hylæus flavipes, *Fab. Ent. Syst.* ii. 305. 11, ♂.
Melitta flavipes, *Kirby, Mon. Ap. Angl.* ii. 55. 15.
Apis subaurata, *Rossi, Faun. Etrus. Mant.* p. 321. 144.
Panz. Faun. Germ. 56. 4.
Brullé, Expéd. Morée, iii. 352. 777, ♀.
Apis seladonia, *Fab. Ent. Supp.* p. 276. 120.
Megilla seladonia, *Fab. Syst. Piez.* p. 334. 28.
Melitta seladonia, *Kirby, Mon. Ap. Angl.* ii. 57. 16.
Halictus seladonius, *Latr. Hist. Nat. Crust. Ins.* xiii. 367. 4.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. p. 203. 8; *Revis. Ap. Boreal.* p. 247. 25.
Halictus virescens, *St. Farg. Hym.* ii. 279. 19?
Halictus flavipes, *Smith, Zool.* vi. 2042. 3, ♂ ♀.
Hab. Britain; France; Germany; Greece; Sweden; Finland; Nova Scotia; Mount Pleasant, Ohio.

Obs. The specimens of this species from America are larger than any yet observed from other localities, but in other respects no difference has been detected; the sculpture of the metathorax, a strong character, is the same, as is also the neuration of the wings.

29. Halictus morio. B.M.

Hylæus morio, *Fab. Ent. Syst.* ii. 306. 16, ♂.
Coqueb. Illustr. Ic. Ins. p. 25. t. 6. f. 5, ♂.

Melitta morio, *Kirby*, *Mon. Ap. Angl.* ii. 60. 19, ♂ ♀.
Halictus morio, *Zett. Ins. Lapp.* p. 462. 2.
St. Farg. Hym. ii. 284. 26.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. p. 204. 9.
Smith, Zool. vi. 2101. 6.

Hab. Britain; France; Italy; Finland.

30. Halictus æratus. B.M.

Melitta ærata, *Kirby*, *Mon. Ap. Angl.* ii. 58. 17, ♂ ♀.
Halictus ærata, *Smith, Zool.* vi. 2043. 4, ♂ ♀.

Hab. Europe.

31. Halictus tumulorum. B.M.

Apis tumulorum, *Linn. Faun. Suec.* 1685; *Syst. Nat.* i. 953. 2. & *Cab. Mus. Linn. Soc.* ♂.
Fabr. Syst. Ent. p. 388. 57.
Halictus gramineus, *Smith, Zool. App.* vii. 58?
Halictus fasciatus, *Nyland. Revis. Ap. Boreal.* p. 247, ♀.

Hab. Britain; Sweden; Finland.

32. Halictus fulvicornis. B.M.

Melitta fulvicornis, *Kirby*, *Mon. Ap. Angl.* ii. 67. 27, ♂.
Halictus fulvicornis, *Smith, Zool.* vi. 2170. 20.

Hab. Britain.

33. Halictus major.

Halictus major, *Nyland. Revis. Apum Boreal.* p. 240. 7.

Hab. France; Russia.

34. Halictus lineolatus. B.M.

Halictus lineolatus, *St. Farg. Hym.* ii. 275. 14.

Hab. France.

35. Halictus leucozonius. B.M.

Apis leucozonia, *Schrank*, *Ins. Aust.* p. 406. 319, ♀.
Rossi, Mant. p. 319.
Melitta leucozonia, *Kirby*, *Mon. Ap. Angl.* ii. 76. 33, ♂ ♀.
Halictus leucozonius, *St. Farg. Hym.* ii. 275. 13.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. p. 199. 3; *Revis. Ap. Boreal.* p. 240. 8.
Smith, Zool. vi. 2171. 21.

Hab. Britain; France; Italy; Germany; Belgium.

36. HALICTUS RUBICUNDUS. B.M.

Apis rubicundus, *Christ. Hym.* p. 190. t. 16. f. 10, ♀.
Apis flavipes, *Panz. Faun. Germ.* 56. 17, ♀.
Melitta rubicunda, *Kirby, Mon. Ap. Angl.* ii. 53. 14, ♂ ♀.
Curtis, Brit. Ent. x. t. 449.
Halictus nidulans, *St. Farg. Hym.* ii. 269. 5.
Halictus rubicundus, *Kirby, Faun. Boreal. Amer.* p. 267. 1 ?
Nyland. Act. Soc. Sc. Fenn. p. 198. 2.
Smith, Zool. vi. 2041. 2.

Hab. England; France; Germany; Finland; America?

37. HALICTUS ZONULUS. B.M.

Halictus zonulus, *Smith, Zool.* vi. 2171. 22, ♂ ♀.
Nyland. Revis. Apum Boreal. p. 241. 9.

Hab. England; Denmark; Sweden.

38. HALICTUS BIFASCIATUS.

Halictus bifasciatus, *Brullé, Expéd. Sc. Morée, Zool.* iii. 349. 771. t. 49. f. 4.

Hab. Morea.

39. HALICTUS PALLENS.

Halictus pallens, *Brullé, Expéd. Sc. Morée, Zool.* iii. 550. 772.

Hab. Morea.

40. HALICTUS LATERALIS.

Halictus lateralis, *Brullé, Expéd. Sc. Morée, Zool.* iii. 349. 769.

Hab. Morea.

41. HALICTUS SEMIÆNEUS. B.M.

Halictus semiæneus, *Brullé, Expéd. Sc. Morée, Zool.* iii. 552. 776. t. 49. f. 6.

Hab. Morea; Spain.

41*. HALICTUS RUFIPES.

Andrena rufipes, *Fabr. Ent. Syst.* ii. 308. 2; *Syst. Piez.* 324. 9.
Coqueb. Illus. t. 25. f. 10.

Hab. Barbary.

42. HALICTUS VIRIDIS. B.M.

Halictus viridis, *Brullé, Hist. Nat. Il. Canar.* ii. 88. 32.

Hab. Canary Islands; Madeira.

43. Halictus lætus.

Halictus lætus, *Brullé, Hist. Nat. Il. Canar.* ii. 88. 33.
Hab. Canary Islands.

44. Halictus concinnus.

Halictus concinnus, *Brullé, Hist. Nat. Il. Canar.* ii. 88. 34. t. 3. f. 13.
Hab. Canary Islands.

45. Halictus unicolor. B.M.

Halictus unicolor, *Brullé, Hist. Nat. Il. Canar.* ii. 88. 35.
Hab. Canary Islands; Madeira.

46. Halictus chalcodes.

Halictus chalcodes, *Brullé, Hist. Nat. Il. Canar.* ii. 87. 31.
Hab. Canary Islands.

47. Halictus cylindricus.

Hylæus cylindricus, *Fabr. Ent. Syst.* ii. 302. 1; *Syst. Piez.* p. 319. 1.
Halictus cylindricus, *Brullé, Expéd. Sc. Morée, Zool.* iii. 552. 778.
Hab. Germany; Morea.

48. Halictus implicatus, n. s.

Male. Length 4 lines.—Black, the clypeus much produced, its anterior margin broadly yellow, with a central angular stripe above, the labrum yellow; antennæ as long as the head and thorax, fulvous beneath. Thorax very finely and closely punctured on the disk, covered on the sides and beneath with long white pubescence; the anterior tibiæ and tarsi, and apical joints of all the tarsi, ferruginous; wings hyaline, nervures fuscous, the enclosed space at the base of the metathorax rugose. Abdomen elongate, shining, minutely punctured, the base thinly covered with long white pubescence.
Hab. Canary Islands. (Coll. W. W. Saunders, Esq.)

49. Halictus facilis, n. s. B.M.

Male. Length $1\frac{3}{4}$ line.—Head and thorax of a metallic blue, the former obscure; the face below the insertion of the antennæ, the labrum, mandibles, palpi, tongue, and the flagellum beneath, yellow, the latter ferruginous above; the legs yellow, the femora

and posterior tibiæ have a ferruginous stain, the posterior pair being yellow merely at the apex; the wings splendidly iridescent and clear hyaline, the tegulæ and nervures pale testaceous. Abdomen testaceous, margins of the segments pale rufo-testaceous.

Hab. Malta.

50. Halictus marginatus.

Halictus marginatus, *Brullé, Expéd. Sc. Morée*, iii. 351. 774. t. 49. f. 5.
Luc. Expéd. Sc. Algér. p. 185. 98.

Hab. Morea; Algeria.

51. Halictus pauperatus.

Halictus pauperatus, *Brullé, Expéd. Sc. Morée*, iii. 351. 775.
Luc. Expéd. Sc. Algér. p. 185. 99.

Hab. Morea; Algeria.

52. Halictus albo-maculatus.

Halictus albo-maculatus, *Luc. Expéd. Sc. Alger.* p. 182. 93. t. 7. f. 1.

Hab. Algeria.

53. Halictus albo-cinctus.

Halictus albo-cinctus, *Luc. Expéd. Sc. Alger.* p. 183. 94. t. 7. f. 2.

Hab. Algeria.

54. Halictus fascialis, n. s.

Male. Length 3 lines.—Black, the face covered with hoary pubescence, the antennæ submoniliform, thorax closely and finely punctured, below the post-scutellum a space finely longitudinally rugose, behind which is an abbreviated shining ridge; the anterior tibiæ in front and the apical joints of the tarsi ferruginous; the posterior tibiæ and tarsi covered with short silvery pubescence; wings subhyaline, the nervures ferruginous, tegulæ rufo-piceous. Abdomen elongate, the margins of the two basal segments depressed and bright rufo-testaceous, as is the entire abdomen beneath, above closely and finely punctured.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

55. Halictus pallidipennis, n. s.

Female. Length 2½ lines.—Black, the face thinly covered with short griseous pubescence, the flagellum beneath pale ful-

vous, tips of the mandibles ferruginous; the disk of the thorax has similar pubescence to the face, the sides of the metathorax clothed with rather long white pubescence, tegulæ of a testaceous yellow; wings clear hyaline, nervures very pale, the apical ones nearly obliterated; the tibiæ and tarsi pale fulvous; abdomen ovate, margins of the segments broadly testaceous; the basal segment of the abdomen smooth and shining, the rest densely covered with short griseous pubescence.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

56. Halictus vittatus, n. s.

Female. Length 5 lines.—Black, the face and vertex have a thin pale fulvous pubescence, on the cheeks it is paler, the clypeus shining, coarsely sculptured at the apex and ciliated with ferruginous hairs; the antennæ beneath rufo-piceous towards their apex; the thorax clothed with pale fulvous pubescence, most thinly so on the disk; base of the metathorax enclosed by an elevated ridge; wings rufo-hyaline, nervures ferruginous; tarsi ferruginous, beneath clothed with bright ferruginous hair, above with fulvous; abdomen ovate, delicately punctured, the apical margins of the segments cream-coloured, in some specimens having a reddish hue, and also varying a little in width in different specimens.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

57. Halictus deceptus, n. s.

Female. Length 4 lines.—Black, head and thorax moderately punctured, the face covered with griseous pubescence; clypeus strongly punctured, the anterior margin truncate, the lateral angles produced, forming blunt teeth. Thorax thinly clothed with fulvous pubescence, palest beneath; the legs clothed with fulvous pubescence above, the apical joints of the tarsi ferruginous; wings subhyaline, nervures ferruginous. Abdomen shining, very minutely and closely punctured, the first segment with a patch of white pubescence at its base laterally, another on each side of the basal margin of the second, and a subinterrupted one on the third, the anal rima ferruginous, margined with fulvous pubescence; beneath, the margins thinly fringed with long pale pubescence.

Hab. Cape of Good Hope. (Coll. F. Smith.)

58. Halictus frontalis, n. s. B.M.

Male. Length 5 lines.—Black, head and thorax closely punctured, the clypeus much produced, coarsely punctured, the face below the insertion of the antennæ covered with fulvous pubes-

cence; the flagellum beneath fulvous towards the base. The thorax covered with fulvous pubescence, most thinly so on the disk; wings subhyaline, nervures testaceous, the stigma palest, the second submarginal cell quadrate; the tibiæ and tarsi, as well as the femora beneath, fulvous. Abdomen elongate, the apical margins of the segments having a band of white pubescence, the first interrupted; at the apex a few long fulvous hairs.

Hab. Africa.

59. HALICTUS TERMINALIS, n. s. B.M.

Female. Length 2½ lines.—Black, head and thorax very closely and finely punctured, the antennæ rufo-testaceous beneath. Thorax, the sides and beneath have a thin griseous pubescence; the enclosed space at the base of the metathorax finely reticulate; wings hyaline, iridescent, the tegulæ and nervures very pale testaceous; the tarsi ferruginous, their pubescence fulvous. Abdomen ovate, smooth and shining, having a thin griseous pubescence towards the apex, which is bright ferruginous at the sides of the anal rima.

Hab. South Africa.

60. HALICTUS RUFO-MARGINATUS, n. s. B.M.

Female. Length 4½ lines.—Black, the head and thorax closely and strongly punctured, the clypeus shining, coarsely punctured, the flagellum testaceous beneath towards the apex, a little pale fulvous pubescence on the face. The thorax thickly covered with pale fulvous pubescence, most sparing on the disk; the tegulæ nigro-piceous; wings subhyaline, iridescent, the nervures pale ferruginous. Abdomen ovate, closely and finely punctured, the apical margins of the first and second segments smooth and shining, the first bright rufo-piceous, the second piceous; the base of the second and third segments depressed and covered with a short white dense pubescence.

Hab. South Africa.

61. HALICTUS IRIDIPENNIS, n. s. B.M.

Male. Length 2¾ lines.—Black, head and thorax very finely and very closely punctured, the apex of the clypeus, the labrum and tips of the mandibles yellow, flagellum beneath fulvous. Thorax, the base of the metathorax coarsely sculptured, not enclosed; the post-scutellum covered with white pubescence, also a patch on each side behind the wings; the tegulæ pale testaceous, the wings splendidly iridescent, nervures ferruginous; the knees and the tarsi pale ferruginous. Abdomen shining, margins slightly depressed, at the basal margin of the second

segment laterally a patch of griseous pubescence; the sides have a scattered griseous pubescence; beneath, the margins of the segments piceous.

Hab. Sierra Leone.

62. HALICTUS AURIFRONS, n. s. B.M.

Male. Length 2½ lines.—Black, the face covered with a golden pubescence, the flagellum fulvous beneath, mandibles ferruginous at their apex, the clypeus not produced. Thorax, above a thinly scattered golden-coloured pubescence, the post-scutellum and sides of the metathorax covered with white pubescence; beneath, the pubescence is pale yellow; the wings hyaline, iridescent, the tegulæ and nervures pale testaceous; legs rufo-piceous, the tarsi and knees pale ferruginous. Abdomen ovate, nigro-piceous, on the apical margins of the three basal segments laterally an angular patch of white pubescence.

Hab. Sierra Leone.

63. HALICTUS PRODUCTUS, n. s. B.M.

Male. Length 4 lines.—Black, head and thorax closely and moderately punctured, sides of the face covered with a downy pale fulvous pubescence, the clypeus very much produced, extending beyond the eyes half their length, and having a number of large punctures; the antennæ subclavate; the front of the thorax covered with a yellow downy pubescence; wings subhyaline, their apex fuscous, nervures pale ferruginous; beneath, the thorax has large scattered punctures, and is covered with an ashy pile; legs dark rufo-testaceous, the apical joints of the tarsi ferruginous, their pubescence pale fulvous, the basal joint of the tarsi beneath is bright fulvous. Abdomen clavate, rufo-fuscous towards the base, the apical margins of the segments pale testaceous and having a silvery pubescence placed transversely, crossing which are a few long pale hairs.

Obs. The single specimen from which the above description was drawn, differs from the typical neuration of the genus, but possibly it may be merely a variety; both the recurrent nervures are received by the third submarginal cell.

Hab. Sierra Leone.

64. HALICTUS CLAVATUS, n. s. B.M.

Male. Length 2¾ lines.—Head and thorax black, closely and finely punctured, antennæ fulvous beneath, the face covered with a silvery white pubescence. Thorax, the wings hyaline, their apex having a fuscous cloud, the tegulæ and nervures rufo-

piceous; the legs rufo-piceous, the tarsi and anterior tibiæ paler. Abdomen nigro-piceous, clavate, the basal segment subpetiolate.

Hab. Sierra Leone.

65. Halictus jucundus, n. s. B.M.

Female. Length 3½ lines.—Brassy green, very finely and closely punctured, the face and cheeks covered with pale pubescence, that on the vertex fulvous; the flagellum rufo-testaceous beneath. The disk of the thorax thinly clothed with fulvous pubescence; the wings hyaline, the nervures and tegulæ pale testaceous; the tarsi ferruginous, as well as the anterior tibiæ in front, the pubescence on the tibiæ and tarsi pale fulvous. Abdomen ovate, thinly covered with pale pubescence, margins of the segments depressed and having a band of pale yellow pubescence, the anal rima fulvous.

Male.—Closely resembles the female; the apex of the clypeus, labrum and mandibles yellow, the latter ferruginous at their apex; the flagellum fulvous beneath; the tibiæ and tarsi of a reddish yellow, the margins of the segments of the abdomen much depressed.

Hab. Cape; Sierra Leone.

66. Halictus sordidus, n. s.

Female. Length 2½ lines.—Black, head and disk of the thorax obscurely green, very delicately and closely punctured, the flagellum testaceous beneath, mandibles ferruginous; the base of the metathorax covered with irregular radiating delicate striæ; tegulæ testaceous, wings subhyaline, iridescent, nervures ferruginous; legs dark testaceous, the tarsi palest; the tibiæ and tarsi have silvery glittering pubescence, in some lights partaking of a golden lustre; the floccus silvery white. Abdomen fuscous, oblong-ovate, smooth, shining and impunctate; anal rima ferruginous; beneath testaceous, the margins of the segments thinly fringed with pale pubescence.

Hab. New Zealand. (Coll. F. Smith.)

67. Halictus rufipes, n. s.

Female. Length 4½ lines.—Black, the face closely and finely, the vertex distantly, and the clypeus distantly but deeply punctured; the apex of the clypeus and mandibles, the scape and apical joints of the antennæ rufo-piceous. The thorax shining on the disk, sparingly but finely punctured; the metathorax opake and having a lateral thin fringe of white pubescence; the scales

of the wings rufo-testaceous; a small patch of fulvous pubescence on the collar laterally, as well as a fringe behind the tubercles; the wings subhyaline, their anterior margins fuscous; all the femora, tibiæ and tarsi rufous, the latter having a thick fulvous pubescence; the flocculus on the posterior femora beneath white; a fascia of fulvous pubescence at the base of the second and third abdominal segments, the apical margins of the following narrowly piceous.

Hab. Melbourne, Australia. (Coll. W. H. L. Walcott, Esq.

68. HALICTUS FLORALIS, n. s. B.M.

Female. Length 2 lines.—Brassy green, the flagellum fulvous, slightly fuscous above, mandibles ferruginous. Thorax very closely and finely punctured, base of the metathorax finely reticulate, margin of the truncation smooth and shining; wings hyaline, splendidly iridescent, the nervures and tegulæ pale testaceous: the tibiæ, tarsi and knees fulvous. Abdomen shining, very delicately punctured, the anal rima fulvous.

Hab. New Holland.

69. HALICTUS BICINGULATUS, n. s.

Female. Length 4 lines.—Black, the head and thorax very closely punctured, a patch of pale fulvous pubescence on each side of the collar, and the post-scutellum clothed with the same: the tegulæ rufo-testaceous, the wings rufo-hyaline, their nervures ferruginous; the apex of the anterior and intermediate femora, the whole of the posterior pair, and all the tibiæ and tarsi rufo-fulvous. Abdomen elongate-ovate, the apical margins of all the segments rufo-piceous; a band of yellowish white pubescence at the base of the second and third segments; margins of the anal rima ferruginous; beneath, all the margins rufo-testaceous.

Hab. Melbourne, Australia. (Coll. W. H. L. Walcott, Esq.)

70. HALICTUS LANARIUS, n. s. B.M.

Female. Length 4½ lines. — Black, head very closely and finely punctured, the clypeus coarsely punctured. Thorax strongly and closely punctured on the disk; the base of the metathorax finely reticulate and enclosed by a smooth elevation; the sides have a thin griseous pubescence; wings subhyaline, their nervures ferruginous; the tibiæ and tarsi above clothed with fulvous pubescence, the tarsi ferruginous. Abdomen very closely and finely punctured; at the basal margin of the second.

third and fourth segments a fascia of white downy pubescence, interspersed with long pale hairs, the apex of the abdomen fulvous; beneath, the segments are smooth at their base and punctured towards their apical margins, which are more or less testaceous.

Hab. Hunter River, Australia.

71. HALICTUS SPHECODOIDES, n. s. B.M.

Female. Length 2 lines.—Head black, with a green hue in some specimens, the flagellum nigro-piceous beneath, mandibles ferruginous at their apex. Thorax black, the disk green; the tegulæ pale testaceous, nervures ferruginous, the stigma fuscous; wings subhyaline, beautifully iridescent; the anterior tibiæ, the knees of the intermediate and posterior pairs, and the tarsi, ferruginous; the anterior tibiæ frequently black or fuscous above. Abdomen ferruginous, smooth and shining, the base black; sometimes the apex fuscous.

Hab. New Holland.

72. HALICTUS CARBONARIUS, n. s.

Female. Length 4 lines.—Jet-black, head rather finely rugose, the clypeus having large deep punctures. Thorax shining, strongly, but not very closely punctured; the enclosed space at the base of the metathorax has a short rugose striation, the metathorax truncate, the truncation smooth and shining; wings slightly fusco-hyaline; legs clothed with dark fuscous pubescence, the floccus nearly white. Abdomen elongate-ovate, closely and finely punctured, the apical margins of the segments smooth and shining, the anal rima fuscous, margined with black pubescence.

Hab. Sydney, New South Wales. (Coll. F. Smith.)

73. HALICTUS ORBATUS, n. s.

Female. Length 3 lines.—Black, head very minutely and closely punctured, the clypeus coarsely punctured and ciliated with fulvous hairs, thinly covered with pale pubescence. Thorax thinly clothed with pale pubescence, the disk strongly punctured, the enclosed space at the base of the metathorax covered with radiating rugose sculpture; the wings hyaline, their extreme base, the nervures and tegulæ pale testaceous; the tibiæ and tarsi covered above with silvery white pubescence, tarsi beneath pale fulvous, apical joints of the tarsi ferruginous. Abdomen globose, shining at the base, finely and closely punctured, the margins of the segments narrowly rufo-piceous, a patch of white pubescence at the base of the second segment

laterally, the following segments thinly covered with white pubescence; beneath, the margins fringed with long pale pubescence.
Hab. Van Diemen's Land. (Coll. J. S. Baly, Esq.)

74. HALICTUS COGNATUS, n. s. B.M.

Male. Length 2 lines.—Black, the disk of the thorax æneous, the flagellum fulvous beneath, the face clothed with white pubescence, the apex of the clypeus, labrum and mandibles yellow, the latter ferruginous at the tips. Thorax shining, finely but not very closely punctured, thinly covered with white pubescence, the enclosed space at the base of the metathorax rugose, beyond which the sides are shining and smooth; the tegulæ yellow anteriorly and rufo-piceous behind; the wings hyaline and splendidly iridescent, the nervures and stigma pale testaceous, the tarsi pale testaceous. Abdomen globose, the basal margin of the second segment much depressed, the whole finely punctured.

Obs. This is probably the male of *H. globosus*; specimens have been received on two or three occasions in company.
Hab. Van Diemen's Land.

75. HALICTUS LIMATUS, n. s. B.M.

Female. Length 2¼ lines.—Black, except the disk of the thorax, which is brassy green; mandibles ferruginous. Thorax having scattered shallow punctures; the base of the metathorax covered with radiating striæ, which become obsolete at the margin of the truncation which is smooth and shining; wings hyaline, splendidly iridescent, nervures ferruginous, stigma fuscous, tegulæ pale testaceous. Abdomen ovate, highly polished, smooth and impunctate, the anal rima fulvous.
Hab. Van Diemen's Land.

76. HALICTUS GLOBOSUS, n. s.

Female. Length 2½ lines.—Black, the disk of the thorax having an æneous tinge; flagellum fulvous beneath, mandibles ferruginous at their apex. Thorax very closely and finely punctured, the base of the metathorax finely reticulate, at its sides a tuft of white pubescence; the sides of the thorax have a white pubescence, most dense at the shoulders; the legs rufo-testaceous, tarsi ferruginous; wings hyaline, iridescent, nervures and tegulæ pale testaceous; beneath, covered with fulvous pubescence; the tibiæ, particularly the posterior pair, covered with a changeable silvery white pubescence. Abdomen subglobose, nigro-

piceous, margins of the segments palest, towards the apex covered with a short silvery pubescence.
Hab. Van Diemen's Land. (Coll. J. S. Baly, Esq.)

77. Halictus repræsentans, n. s. B.M.

Female. Length 4 lines.—Black, head closely punctured, the antennæ nigro-piceous towards their apex. Thorax, the disk closely and moderately punctured; at the base of the metathorax a somewhat concave space, enclosed by an arched elevation, subsinuated at the sides, the space covered by smooth radiating grooves; wings subhyaline, the nervures and stigma ferruginous; the legs covered above with a pale pubescence, which has in certain lights a silvery brightness; the tarsi beneath fulvous, the apical joints ferruginous. Abdomen ovate, shining, very closely and finely punctured; on the basal margins of the second, third and fourth segments a snow-white band, the two first interrupted and forming lateral angular patches of downy pubescence, the anal rima ferruginous.

Male.—Has a general resemblance to the female; neuration of the wings the same, the whole insect thinly sprinkled with griseous pubescence, dense and white on the face and shoulders; apex of the clypeus white; the base of the metathorax is finely longitudinally rugose; abdomen somewhat globose in appearance from being incurved, the pubescence thicker on the basal margins of the segments, but not forming patches or decided fasciæ.
Hab. New Holland; Van Diemen's Land.

Obs. This species very closely resembles the *H. leucozonius* of Kirby, but differs in the sculpture of the metathorax, and also in having the second submarginal cell broader. From an examination of a large number of this apparently abundant species, it is found to vary in the grooving of the enclosed space at the base of the metathorax, the grooving not being always smooth or equally deeply sculptured; the abdominal fasciæ are frequently nearly obsolete, in others broader, sometimes narrower; thus in its varieties resembling those of the *H. leucozonius*. The male is united, from the fact of their having been received together from both localities on numerous occasions.

78. Halictus propinquus, n. s. B.M.

Male. Length 3–3½ lines.—Bronze-green, closely and finely punctured, extreme apex of the clypeus yellow, antennæ fulvous beneath; the face has a hoary pubescence, the clypeus produced, shining and strongly punctured. Thorax clothed in front as

well as on the sides and beneath with a thin hoary pubescence, the enclosed space at the base of the metathorax longitudinally rugose, surrounded by a shining ridge; the tegulæ, nervures, tibiæ and tarsi fulvous yellow; the intermediate and posterior tibiæ have a dark stain in the middle, sometimes only the base and apex yellow; wings subhyaline. Abdomen elongate-ovate, margins of the segments deeply constricted and having a fascia of white pubescence.

Hab. Northern India.

79. Halictus agrestis, n. s.

Female. Length 3 lines.—Black, head above the insertion of the antennæ closely and finely punctured; the clypeus produced, shining, having a few deep punctures, on each side the face is roughly sculptured; antennæ beneath testaceous. The disk of the thorax strongly punctured; at the base of the metathorax is a narrow arched space, which is longitudinally rugose, reaching on each side nearly to the base of the hinder wings; the sides of the metathorax have a longitudinal ridge; wings hyaline, the nervures ferruginous, stigma palest. Abdomen very finely punctured and very highly polished at the base, the following segments covered with a short griseous pubescence, more or less obliterated on the second segment.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

80. Halictus albescens, n. s. B.M.

Female. Length 3 lines.—Black, the face covered with a short hoary pubescence. Thorax, the disk shining, punctured, the sides and beneath covered with hoary pubescence, most dense on the sides of the metathorax, the enclosed space rugose; the post-scutellum covered with a hoary down, and a short stripe or patch of the same at the base of the posterior wings, the latter hyaline and beautifully prismatic, the nervures rufo-testaceous; legs covered with hoary pubescence, the apical joints of the tarsi ferruginous. Abdomen ovate, an oblique stripe at the base laterally, and a fascia at the basal margin of all the segments white, the fascia on the second and third frequently obliterated in the middle.

The male very closely resembles the female, differing only in being as usual more elongate; the antennæ rufo-testaceous, not so long as the head and thorax; in both sexes the abdomen is frequently more or less testaceous.

Hab. Northern India.

81. Halictus rugolatus, n. s.

Female. Length 3¾ lines.—The head and disk of the thorax nigro-æneous, the metathorax black; head closely and finely punctured, the clypeus black, shining and deeply punctured. Thorax more strongly punctured than the head, the metathorax truncate, roughly and irregularly sculptured, the sides and beneath rugose; the tibiæ and tarsi above clothed with pale fulvous pubescence, that beneath is deeper in colour; the wings subhyaline, iridescent, the nervures rufo-testaceous. Abdomen elongate-ovate, the basal segment very smooth and shining, the rest delicately punctured, the apical margins smooth shining and rufo-testaceous; at the basal margins of the second and third segments laterally a patch of white pubescence, on the fourth a more or less interrupted fascia; the apex covered with fulvous pubescence.

Hab. Northern India. (Coll. W. W. Saunders, Esq.)

82. Halictus lucidipennis, n. s.

Female. Length 2¼ lines.—Brassy green, head and thorax closely and finely punctured, antennæ wanting; the face covered with short white pubescence and the clypeus ciliated with white hairs. Thorax, the post-scutellum covered with a short downy white pubescence, on the sides it is longer but of the same colour, the enclosed space at the base of the metathorax finely reticulate, the sides smooth and shining; wings clear hyaline and beautifully iridescent, nervures and tegulæ very pale testaceous; legs rufo-testaceous, the anterior tibiæ, the intermediate and posterior tarsi, pale rufo-testaceous, their pubescence white. Abdomen ovate, finely punctured, the apical margins narrowly testaceous and having pale marginal fasciæ; the anal rima slightly fulvous; beneath, testaceous.

Male.—Sculptured and coloured as in the female; the antennæ pale fulvous, about the length of the head and thorax, fuscous above; all the tibiæ pale, and the margins of the abdominal segments much depressed.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

83. Halictus xanthognathus, n. s.

Male. Length 3½ lines.—Head and thorax black, very closely and moderately punctured, the face thickly covered with short white pubescence, the apex of the clypeus, the labrum, mandibles, palpi and flagellum beneath, yellow; the tubercles, tegulæ, tibiæ and tarsi yellow; the posterior and intermediate tibiæ have a ferruginous stain in front; wings subhyaline, nervures pale fer-

ruginous; the three basal segments of the abdomen red; the first segment is black at the sides of the extreme base, and has two fuscous spots above; the second and third segments at the sides have a black spot; the fourth and following segments black, the apical margins pale testaceous, each successive one more broadly so.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

84. HALICTUS FIMBRIATUS, n. s.

Male. Length 5 lines.—Black, distinctly and not very closely punctured, the clypeus much produced and coarsely punctured, antennæ as long as the head and thorax, the joints subarcuate, rufo-piceous beneath. The sides of the thorax and beneath covered with long white pubescence; the legs have a clothing of similar but shorter pubescence; the anterior tibiæ in front, the intermediate pair at their apex beneath, and the claw-joint of the tarsi ferruginous; wings subhyaline, their apical margins clouded, nervures ferruginous. Abdomen elongate, the apical margins of the segments have a fringe of white pubescence, more or less interrupted in the middle; the apical segment has laterally a tuft of fuscous pubescence; beneath, all the margins fringed with short white pubescence.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

85. HALICTUS CONSTRICTUS, n. s. B.M.

Male. Length 3–3½ lines. — Black, the head and thorax closely punctured, the face clothed with fulvous pubescence in recent specimens, fading to white; apex of the clypeus yellow. The pubescence on the thorax fulvous, thinly scattered on the disk, more dense on the sides and beneath; the anterior tibiæ, the apex of the intermediate and posterior pair, and all the tarsi, of a fulvous yellow; wings subhyaline, nervures ferruginous, tegulæ rufo-piceous. Abdomen closely punctured, elongate-ovate, the margins of the segments much depressed, the apical margins of the segments fringed with pale pubescence, more or less interrupted in the middle; beneath rufo-piceous, the margins of the segments palest, the second and third fringed with pale pubescence, the apical ones with fulvous. In specimens which have been exposed the pubescence becomes white.

Hab. Northern India.

86. HALICTUS SUBOPACUS, n. s. B.M.

Female. Length 4 lines. — Black, the head closely and strongly punctured, the thorax coarsely and the abdomen very

finely and very closely punctured, giving it an opake appearance; the clypeus has some deep elongate punctures, and is ciliated with ferruginous hairs; the thorax clothed with fulvous pubescence, thickly so on the sides; disk naked in all the specimens, probably rubbed; the metathorax truncate, the base coarsely rugose; wings subhyaline, nervures ferruginous, the legs clothed with fulvous pubescence, the apical joints of the tarsi ferruginous. Abdomen ovate, the base thickly covered with fulvous pubescence, the apical margins of the segments depressed, a band of fulvous pubescence at the base of the second and third segments, the anal rima fulvous.

Hab. Foo-cho-foo, North China.

87. Halictus ordinarius, n. s.

Female. Length 4 lines.—Black, head closely and finely punctured, clypeus shining and deeply punctured, ciliated with fulvous hairs; antennæ beneath rufo-piceous, the face clothed with hoary pubescence. Thorax shining and strongly punctured, the pubescence is pale fulvous, thinly scattered in front, on the sides and beneath; the post-scutellum fringed with the same, beneath which the enclosed space is longitudinally rugose, the metathorax rounded at its sides, smooth and regularly punctured; wings subhyaline, fulvous at their base, the tegulæ rufo-piceous; the tibiæ and tarsi above clothed with pale fulvous pubescence, the claw-joints ferruginous. Abdomen ovate, closely and finely punctured, the apical margins of the segments subdepressed and having fasciæ of white pubescence, the anal rima fulvous.

Hab. North China. (Coll. J. S. Baly, Esq.)

88. Halictus affinis, n. s. B.M.

Male. Length 4 lines.—Black, head and thorax finely and closely punctured, the face covered with fulvous pubescence, the clypeus produced, its apex white. The thorax clothed with fulvous pubescence, sparingly so on the disk; the enclosed space at the base of the metathorax longitudinally rugose, beyond which the sculpture is rugged; the tarsi and extreme base and apex of the tibiæ yellow, apical joints of the tarsi ferruginous. Abdomen elongate-ovate, very finely and closely punctured; the base, the sides and margins of the segments have a thin fulvous pubescence.

Obs. This is probably the male of *H. subopacus*.

Hab. Foo-cho-foo, North China.

89. Halictus rubellus.

Halictus rubellus, *Halid. Linn. Trans.* xvii. p. 321.
Hab. Chili. (Coll. W. W. Saunders, Esq.)

90. Halictus insignis, n. s.

Male. Length 5½ lines.—Black, except the head, which is dark green; the clypeus very convex, not much produced; the eyes subemarginate, the ocelli large and brilliant. Thorax clothed with fulvous pubescence, sparingly so on the disk, most dense on the shoulders; the base of the metathorax very smooth and shining; tegulæ rufo-piceous; wings rufo-hyaline, nervures ferruginous; legs dark rufo-testaceous, tarsi ferruginous, clothed with fulvous pubescence, which is also thinly scattered on the tibiæ and femora. Abdomen elongate-ovate, very delicately punctured, except the basal segment, which is impunctate and highly polished; towards the apex the abdomen has a green tinge, and a short hoary pubescence intermixed with long fulvous hairs; beneath, rufo-piceous.
Hab. South America. (Coll. W. W. Saunders, Esq.)

91. Halictus Leprieurii.

Halictus Leprieurii, *Spin. Ann. Soc. Ent. Fr.* vii. 137. 86.
Hab. Cayenne.

92. Halictus gemmatus, n. s. B.M.

Female. Length 2 lines.—Head and thorax coppery green, head very finely and closely punctured, the antennæ, apex of the clypeus, labrum and mandibles rufo-piceous; legs rufo-piceous, the tarsi palest; disk of the thorax shining, very delicately and distantly punctured; the enclosed space at the base of the metathorax on each side irregularly but finely rugose-striate; the tegulæ testaceous; wings hyaline and splendidly iridescent. Abdomen rufo-testaceous, the margins of the segments palest, thinly covered with a scattered white pubescence, principally towards the apex.
Hab. Jamaica.

93. Halictus modestus, n. s.

Female. Length 3¼ lines.—The head and thorax green, the disk of the latter sometimes brassy, both very delicately and very closely punctured; antennæ, mandibles and apex of the clypeus black; the mandibles nigro-piceous towards their apex; the head has a long thin fuscous pubescence, which clothes it entirely, co-

vering the eyes; it is palest on the cheeks. Thorax, beneath the post-scutellum the metathorax is very finely granulated, the margins of the truncation polished; the tegulæ and neuration of the wings piceous, the latter splendidly hyaline; the legs black, the pubescence fuscous. Abdomen olive-green, the margins of the segments highly polished, darker than the intervening portions, the first and second depressed; margins of the anal rima fuscous.

Male.—Coloured and sculptured as in the other sex, the eyes more densely pubescent, antennæ elongate, the flagellum testaceous beneath; the apex of the clypeus and the labrum white; abdomen elongate, subcylindric, narrowed towards the base.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

94. Halictus maculosus, n. s.

Female. Length $4\frac{1}{4}$ lines.—Black, the face covered with a thin ochraceous pubescence; the clypeus truncate, and having large scattered punctures; the flagellum testaceous towards the apex. Thorax, the disk smooth, shining, and very delicately punctured, the enclosed space at the base of the metathorax smooth and shining; wings hyaline, fulvous towards their base, the tegulæ and nervures fulvo-testaceous; the femora, tibiæ and tarsi bright fulvo-testaceous, the anterior femora black towards the base. Abdomen ovate, subdepressed, on the basal margins of the second and third segments laterally a snow-white angular spot; apex of the abdomen fulvous; anal rima ferruginous.

Hab. Chili. (Coll. F. Smith.)

95. Halictus cristatus, n. s.

Female. Length 4 lines.—Black, the head dark green, delicately and very closely punctured; the clypeus shining black, having large deep punctures; the antennæ rufo-piceous towards their apex beneath. Thorax, the disk shining, covered with very delicate and close punctures interspersed with a few larger ones; a tuft of fulvous pubescence on each side covering the tubercles; wings subhyaline, prismatic, nervures testaceous, the stigma palest; the pubescence on the legs pale fulvous, claws ferruginous. Abdomen shining, very delicately punctured, except the sides of the two basal segments, which are covered with large coarse punctures, a row of punctures along the basal margin of the segment, the apical margins of the second and third segments broadly pale testaceous, the apex fulvous, beneath coarsely punctured.

Hab. Chili? (Coll. W. W. Saunders, Esq.)

96. Halictus capitosus, n. s. B.M.

Female. Length 4 lines.—Black, the head wider than the thorax, the face nearly quadrate, the clypeus very slightly produced, shining and deeply punctured, the rest of the face and vertex very finely and closely punctured, the flagellum piceous beneath. Thorax very finely and closely punctured, the pubescence pale fulvous; legs dark ferruginous, apical joints of the tarsi brighter, their pubescence fulvous; the tegulæ pale testaceous, wings fusco-hyaline, the nervures testaceous. Abdomen ovate, delicately but very closely punctured, margins of the segments testaceous, each having a band of white pubescence more or less interrupted on the basal segment, the two first bands cover narrowly the base of the subsequent segment; apex of the abdomen fulvous.

Hab. St. John's Bluff, East Florida; Georgia. (Coll. E. Doubleday, Esq.)

97. Halictus fuscipennis, n. s. B.M.

Female. Length 4 lines.—Black, the head and thorax closely punctured, the clypeus having a few elongate deep punctures at its base, the anterior margin fringed with ferruginous hairs. Thorax, the wings fusco-ferruginous, the posterior pair paler at their base, all the tibiæ and tarsi ferruginous, the metathorax truncate, the superior margin of the truncation ridged, the enclosed space below the post-scutellum rugose. Abdomen very finely and closely punctured, the basal segment shining; the basal margins of the second, third and fourth segments have an interrupted fascia of pale fulvous pubescence.

Male closely resembles the female; the posterior legs and the apex of the femora, the tibiæ and tarsi bright ferruginous; the clypeus has a white spot, its margin as well as the mandibles at their apex ferruginous. Abdomen elongate-ovate.

This species closely resembles *H. coriaceus*, but the colour of the wings is different, and the second and third submarginal cells are of about equal width, the second not being narrowed towards the marginal as in that species.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

98. Halictus fulvipes, n. s. B.M.

Female. Length 3 lines.—Head and thorax brassy green, punctured, the labrum and apex of the mandibles ferruginous; the flagellum testaceous beneath. Thorax more coarsely punctured than the head, having a thin pale fulvous pubescence on the disk, most dense on the sides of the metathorax, which is

truncate behind; the wings splendidly iridescent, having a broad fuscous cloud at their apex, testaceous at their extreme base, as well as the nervures and tegulæ; the tibiæ and tarsi bright fulvous, their pubescence pale. Abdomen ovate, the two basal segments highly polished, the following segments thinly clothed with pale pubescence, at the basal margins of the second and third a patch of white pubescence; the apex fulvous.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

99. Halictus nymphalis, n. s. B.M.

Female. Length 2 lines.—Head and thorax brassy green, very delicately and closely punctured, more strongly so on the clypeus, which has its anterior margin testaceous, as are also the labrum and mandibles, the latter ferruginous at their apex, the flagellum testaceous beneath; the tegulæ pale testaceous, the wings hyaline, splendidly iridescent, the nervures and stigma pale; the femora and tibiæ at their apex and all the tarsi pale rufo-testaceous; the legs have a pale pubescence. Abdomen pale ferruginous, the third and fourth segments broadly fuscous at their base, the whole thickly clothed with pale pubescence.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

100. Halictus Zephyrus, n. s. B.M.

Male. Length 2¾ lines.—Head and thorax brassy green, delicately and very closely punctured, the antennæ elongate, fulvous, above fuscous; the margin of the clypeus and mandibles ferruginous. Thorax brilliantly glossy above, the punctures scattered and minute; the wings splendidly iridescent, the tegulæ and nervures pale testaceous; the tibiæ and tarsi testaceous, the former stained more or less on each side. Abdomen elongate, subclavate, highly polished, rufo-testaceous, and having a splendid green reflection; the margins of the two basal segments depressed, the second and third having laterally a patch of white pubescence at their base; beneath rufo-testaceous.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

101. Halictus pectoralis, n. s. B.M.

Female. Length 3 lines.—Black, the head closely and finely punctured, the clypeus more coarsely so, its apical margin smooth and ciliated with fulvous hairs; flagellum testaceous beneath. Thorax strongly punctured on the disk; metathorax truncate, the enclosed space beneath the post-scutellum rugose, as well as the sides and the entire thorax beneath; the legs have a pale fulvous pubescence, most dense on the intermediate and pos-

terior tibiæ and tarsi; wings subhyaline, the tegulæ and nervures testaceous, iridescent. The two basal segments of the abdomen highly polished, impunctate; the following segments delicately punctured and thinly covered with hoary pubescence.
Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

102. HALICTUS FARINOSUS, n. s. B.M.

Female. Length 5 lines.—Black, very closely and finely punctured; the vertex rather broad behind the eyes, the stemmata placed forwards in a line with the eyes, the head covered with a short hoary pubescence; the thorax is similarly clothed, most sparingly on the disk; a carina which encloses the space below the post-scutellum is interrupted in the middle; the tegulæ testaceous, the wings subhyaline, the nervures ferruginous; the legs have a pale fulvous pubescence above, the tarsi ferruginous; the floccus very pale fulvous. Abdomen ovate, thinly covered with hoary pubescence, the apical margins depressed, each having a broad white fascia; the anal rima fulvous. The entire insect has a powdery or dusty appearance.
Hab. California.

103. HALICTUS LIGATUS. B.M.

Halictus ligatus, *Say*, *Bost. Journ. Nat. Hist.* i. 396. 5.
Hab. United States.

104. HALICTUS CRASSICORNIS. B.M.

Halictus crassicornis, *Kirby*, *Faun. Boreal. Amer.* 267. 2.
Hab. North America.

105. HALICTUS SIMILIS, n. s. B.M.

Female. Length 3–3½ lines.—Black, head closely and finely punctured, the clypeus shining, coarsely punctured, very slightly produced. Thorax closely and finely punctured, the enclosed space on the metathorax longitudinally sculptured with radiating striæ, the sides have a little pale fulvous pubescence; the legs clothed with pale fulvous pubescence, the apical joints of the tarsi ferruginous; the wings hyaline, iridescent, the nervures pale testaceous. Abdomen very smooth and shining at the base, the margins of the segments narrowly testaceous; a patch of white pubescence at the basal margins of the second and third segments.

Obs. This species closely resembles *H. leucozonius*, but differs in the clypeus being less produced, in the colour of the neuration

of the wings, and in the margins of the abdominal segments not being thickened as in that species.

Hab. North America; Hudson's Bay. (Coll. E. Doubleday and G. Barnston, Esqs.)

106. HALICTUS DISCUS, n. s. B.M.

Female. Length 4 lines.—Black, head closely punctured, the clypeus produced and ciliated with pale ferruginous hairs. Thorax, the disk shining, having large scattered punctures; metathorax truncate, above coarsely grooved longitudinally; the tegulæ testaceous, wings subhyaline, the nervures ferruginous; the legs have a silvery pubescence, tinged with yellow in certain lights. Abdomen ovate, shining at the base, finely and closely punctured, except on the basal segment, where they are more scattered; on the basal margins of the second, third and fourth segments a more or less interrupted white fascia; the apical margins thickened.

Hab. North America.

107. HALICTUS CORIACEUS, n. s. B.M.

Female. Length 3½–4 lines.—Black, finely and very closely punctured, giving the abdomen a subopake appearance; the clypeus produced, shining, and having some large scattered punctures, its anterior margin fringed with fuscous pubescence; on the head, thorax and legs the pubescence is pale fulvous, brightest on the posterior tibiæ; the floccus is of the same colour, but paler; the legs dark ferruginous, varying in some specimens in being of a brighter hue; apical joints of the tarsi bright ferruginous; wings hyaline. Abdomen, the basal margins of the second, third, and sometimes of the fourth segments have an uninterrupted band of white pubescence, the apical margins coriaceous; beneath rufo-testaceous, the margins of the segments pale testaceous, and having a narrow white marginal fringe.

Hab. North America; Nova Scotia. (Coll. E. Doubleday and G. Barnston, Esqs.)

108. HALICTUS CONFUSUS, n. s. B.M.

Female. Length 3 lines.—Head and thorax olive-green, finely and very closely punctured; the clypeus usually has a purple tinge and is deeply punctured, its margin ciliated with pale fulvous hairs, the apex of the flagellum beneath testaceous. Thorax, the enclosed space beneath the post-scutellum has deep radiating rugose striæ at the base, the margin smooth, sides of the metathorax and the entire thorax beneath roughened, the punctures

uniting; wings hyaline, splendidly iridescent, the tegulæ and nervures pale testaceous; legs nigro-piceous, the apical joints of the tarsi ferruginous, the pubescence pale fulvous, brightest on the basal joint of the tarsi within. Abdomen ovate, nigro-æneous, delicately and closely punctured, at the sides and towards the apex having a thin griseous pubescence; anal rima slightly fulvous.

Male.—Colouring and sculpture as in the female; antennæ elongate, the flagellum fulvous beneath, the margin of the enclosed space on the metathorax ridged. Abdomen elongate, slightly narrowed at the base.

Hab. Trenton Falls, New York; Hudson's Bay. (Coll. E. Doubleday and G. Barnston, Esqs.)

109. HALICTUS IMITATUS, n. s. B.M.

Male. Length 2 lines.—Head brassy green, very finely and closely punctured, the flagellum fulvous beneath. Thorax blue-green, shining, not so closely punctured as the head; wings hyaline, splendidly iridescent, tegulæ testaceous, the nervures fuscous; legs rufo-testaceous, tarsi and knees pale testaceous. Abdomen elongate, subclavate, rufo-fuscous, varying in depth of colouring, smooth, shining and impunctate.

Obs. In general appearance resembling *H. Zephyrus*, but, independent of size, differs in the colour of the thorax, and in the second submarginal cell being proportionably narrower and much more contracted towards the marginal.

Hab. North America. (Coll. E. Doubleday, Esq.)

110. HALICTUS PILOSUS, n. s. B.M.

Female. Length 3 lines.—Bright brassy green, head and thorax finely and very closely punctured, the former thinly covered with fulvous pubescence, the flagellum testaceous towards the apex beneath. Thorax in front thickly clothed with a short fulvous pubescence, the enclosed space beneath the post-scutellum longitudinally rugose, the pubescence on the sides of the metathorax pale fulvous; wings hyaline, splendidly iridescent, the tegulæ and nervures pale testaceous; legs rufo-piceous, clothed with fulvous pubescence. The basal segment of the abdomen naked, the remaining segments densely covered with a short fulvous pilosity; the second segment usually has the pubescence more or less obliterated on the disk.

Hab. North America. (Coll. E. Doubleday, Esq.)

111. HALICTUS PARALLELUS. B.M.

Halictus parallelus, *Say, Bost. Journ.* i. 397. 6.
Halictus Leronxii, *St. Farg. Hym.* ii. 372. 9.

Closely resembles *H. rubicundus*; differs from that species in having the abdomen less shining, caused by its more closely and distinctly punctured abdomen, and by having four uninterrupted white bands; the first covers the basal margin of the second segment, though less defined, as well as the apical margin of the first.

Hab. N. America; Trenton Falls; Hudson's Bay; Nova Scotia; Arctic America, South of Lake Winnepeg. (Coll. Dr. Richardson.)

112. HALICTUS LÆVISSIMUS, n. s. B.M.

Female. Length $2\frac{3}{4}$ lines.—Head and thorax green, finely and closely punctured, the face thinly covered with a short hoary pubescence, the same also covers the sides of the thorax and the legs above; the floccus at the base of the posterior femora white; the apical joints of the tarsi and also the tegulæ testaceous; wings hyaline, their nervures pale testaceous; the enclosed space beneath the post-scutellum is longitudinally rugose-striate. Abdomen oblong-ovate, very smooth and shining, impunctate, the fourth segment covered with short white pubescence, the fifth more densely so, the sides of the anal rima pale fulvous; beneath, the apical segments are fringed with long pale hairs.

Hab. Arctic America, South of Lake Winnepeg. (Coll. Dr. Richardson.)

113. HALICTUS SUBQUADRATUS, n. s. B.M.

Male. Length $3\frac{1}{4}$ lines.—Black, head subquadrate, the clypeus very slightly produced, its apical half pale yellow; the antennæ beneath testaceous, the two basal joints black; the face clothed with griseous pubescence, which also thinly clothes the sides of the thorax, the metathorax, and the legs; disk of the thorax shining, finely punctured; wings hyaline, their apical margins slightly clouded, beautifully iridescent. Abdomen elongate-ovate, a patch of white pubescence on the basal margins of the second and third segments.

This is probably the male of *H. coriaceus*.

Hab. Trenton Falls, North America. (Coll. E. Doubleday, Esq.)

114. HALICTUS CREBERRIMUS, n. s.

Female. Length 2 lines.—Head and thorax bronzed-green, extremely closely and finely punctured, the clypeus much pro-

duced; the antennæ testaceous beneath. The base of the metathorax has a number of irregular radiating elevations becoming obsolete at the margin of the truncation of the metathorax, the sides of which as well as the whole thorax beneath is rugose; tegulæ pale testaceous; wings hyaline, beautifully iridescent; the legs testaceous, the knees and tarsi palest; abdomen testaceous, having an æneous reflection, apex covered with white pubescence, the anal rima ferruginous.

Obs. This species closely resembles *H. inconspicuus*, but is much more delicately sculptured and the clypeus more produced.

Hab. N. America. (Coll. F. Smith.)

115. Halictus inconspicuus, n. s. B.M.

Female. Length 1½ line.—Head and thorax brassy-green, finely and closely punctured, the former rounded; the enclosed space beneath the post-scutellum roughly granulated; the wings hyaline, splendidly iridescent, the nervures and tegulæ pale testaceous; the legs pale testaceous. Abdomen rufo-testaceous, smooth and shining; the apex pale testaceous.

Hab. North America.

Genus 16. AUGOCHLORA, n. g.

F. Smith's MSS. (Details, Plate III.)

Head usually about the width of the thorax, the eyes subemarginate, in some species distinctly reniform. Thorax globose, anterior wings having one marginal and three submarginal cells; the first submarginal cell as long as the second and third united, the first recurrent nervure uniting with the second transverse cubital nervure. Abdomen ovate, in the females subelongate-ovate:—all the species brilliant metallic green.

1. Augochlora diversipennis. B.M.

Halictus? diversipennis, *St. Farg. Hym.* ii. 282. 23, ♀.

Male.—Brilliant golden-green, head closely and finely punctured, the clypeus very convex, coarsely punctured, its anterior margin with a narrow yellow fascia, the labrum and mandibles yellow, the third joint of the antennæ yellow beneath. Thorax rather strongly punctured, wings hyaline, tegulæ and nervures pale testaceous; the knees, extreme apex of the tibiæ and the tarsi yellow testaceous. Abdomen ovate, thinly covered at the base and sides with fulvous pubescence, the apical margins of the segments fringed with fulvous pubescence, apex of the abdomen beneath ferruginous.

Hab. Para, Brazil.

2. Augochlora Electra, n. s. B.M.

Male. Length 4–4½ lines.—Brilliant golden-green, the head closely and finely punctured, the clypeus coarsely punctured, antennæ black, mandibles dark rufo-testaceous. Thorax strongly punctured, the punctures sometimes uniting; the enclosed space at the base of the metathorax concave, smooth and shining, the thorax beneath and sides of metathorax strongly punctured; wings subhyaline, nervures and outer margin of the tegulæ rufo-testaceous, the tarsi rufo-testaceous. Abdomen oblong-ovate, having a thinly scattered fulvous pubescence, the apical margins of the segments fringed with short fulvous pubescence; the apical segments beneath ferruginous.

Hab. Brazil.

3. Augochlora Pandora, n. s. B.M.

Female. Length 4 lines.—Brilliant golden-green, head and thorax very finely and very closely punctured, the face and vertex have a thin pale ochraceous pubescence, that on the cheeks and clypeus white, the latter covered with large coarse punctures; the flagellum fulvous beneath, the margin of the clypeus, labrum and mandibles dark rufo-piceous; the metathorax truncate behind, the enclosed space at its base rugose, enclosed by an elevated margin; tegulæ and nervures rufo-testaceous; wings hyaline, very faintly clouded towards their apical margins; legs rufo-testaceous, tibiæ above brilliant golden-green, the coxæ and femora more or less so in certain lights; the floccus cinereous, as well as the pubescence of the legs, which however varies in certain lights, to golden on the tarsi, which are ferruginous, and to silvery on the posterior tibiæ. Abdomen covered with a short fulvous pubescence; the margins of the segments are of a purple coppery colour, beneath strongly punctured.

Hab. Brazil.

4. Augochlora bucephala, n. s. B.M.

Female. Length 5–5½ lines.—Brilliant golden-green; head very finely and closely punctured, wider than the thorax; clypeus broadly truncate, not produced, ciliated with ferruginous hairs; antennæ black, testaceous beneath; disk of the thorax very finely punctured, having larger punctures interspersed; base of the metathorax very finely punctured, not enclosed; the outer margin of the tegulæ broadly pale testaceous, wings rufo-hyaline, legs green, the tarsi ferruginous; the pubescence of the legs fulvous, having on the posterior legs a silvery hue in certain

lights. Abdomen ovate, very convex, the fifth segment covered with fulvo-fuscous pubescence, the anal rima fulvous.
Hab. Brazil.

5. Augochlora graminea. B.M.

Megilla graminea, *Fabr. Syst. Piez.* p. 334. 29, ♀.
Halictus nigro-marginatus, *Spin. Ann. Soc. Ent. Fr.* xi. 137. 85.

Male.—Closely resembling the female, but more elongate, very closely and finely punctured throughout, the clypeus produced, the margin of the clypeus, labrum and mandibles yellow, the antennæ fulvous beneath; the tegulæ pale testaceous, the knees and apical joints of the tarsi testaceous. Abdomen, the apical margins of the segments black; beneath they are rufo-testaceous, as well as the apical segments.
Hab. Brazil; Cayenne.

6. Augochlora Titania, n. s. B.M.

Female. Length 2 lines.—Head and thorax bright golden-green, closely and finely punctured. Thorax, the base of the metathorax has a radiating finely rugose striation, not distinctly enclosed; wings rufo-hyaline; legs rufo-testaceous, the anterior tibiæ and the tarsi palest. Abdomen clavate, purple metallic, being much narrowed at the base, which is highly polished, reflecting the bright green of the thorax; the apical margin of the basal segment depressed.
Hab. Para.

7. Augochlora Urania, n. s.

Female. Length 3 lines.—Head and thorax brassy-green, very finely and closely punctured, the apex of the clypeus very coarsely punctured and of a purple metallic hue; labrum and mandibles of an obscure rufo-testaceous colour, nearly black; legs black; the coxæ alone have a metallic tinge, the tarsi lighter, their pubescence fuscous, in certain lights having a silvery reflection, on the tarsi beneath fulvous; wings rufo-hyaline, iridescent; the enclosed space at the base of the metathorax covered with radiating striæ, enclosed by a shining ridge. Abdomen blue-green, the margins of the segments black, smooth and shining, covered with a thin short griseous pubescence, interspersed with fuscous pubescence, beneath dark rufo-testaceous.

Obs. Very similar to *A. Floralia*, differing chiefly in the colour of the legs, abdomen and wings.
Hab. Brazil. (Coll. W. W. Saunders, Esq.)

8. Augochlora Paphia, n. s.

Female. Length 4 lines.—Head and thorax golden-green; head very closely punctured, the vertex fringed with fuscous pubescence, a few scattered hairs of the same on the face; antennæ black, the flagellum beneath testaceous; the disk of the thorax finely punctured and roughened by an intermixture of large shallow punctures; base of the metathorax smooth and shining, not enclosed; legs dark rufo-testaceous, the coxæ, femora and tibiæ being tinged with green, perceptible in certain lights, clothed with fuscous pubescence above, with fulvous on the tarsi beneath, the floccus griseous; wings rufo-hyaline. Abdomen finely and distantly punctured, of a blue-green, the margins purple, fringed with short fulvous hairs.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

9. Augochlora Cytherea, n. s.

Female. Length 4 lines.—Brilliant golden-green, head very finely and closely punctured, the clypeus coarsely punctured and of a purple metallic colour at the apex, labrum and mandibles dark rufo-piceous; antennæ black, the flagellum testaceous towards the apex beneath; disk of the thorax covered with punctures of various sizes, most strongly so anteriorly; wings hyaline; legs green, tarsi rufo-testaceous, their pubescence pale fulvous above, bright fulvous on the tarsi beneath. Abdomen ovate, very finely punctured, the margins of the first and second segments depressed; thinly covered with pale fulvous pubescence; the fifth segment covered with dark fuscous pubescence; the anal rima ferruginous.

Hab. Brazil; Banks of the Amazon. (Coll. W. W. Saunders, Esq.)

10. Augochlora Tarpeia, n. s.

Female. Length 3 lines.—Black, with a purple metallic hue, brassy on the cheeks, vertex and basal margin of the second abdominal segment; the sides of the clypeus brassy; the flagellum fulvous beneath; thorax very closely and delicately punctured; wings fusco-hyaline, their apical margins clouded. Abdomen somewhat brassy towards the apex, which is clothed with a thin fulvous pubescence.

Male.—Entirely of a purple metallic colour, the head covered with erect fuscous pubescence, the eyes densely pubescent, apex of the clypeus and labrum yellow; mandibles ferruginous, the cheeks and thorax beneath have a long hoary pubescence. Thorax thinly covered with long fuscous pubescence; wings as in the

other sex; the legs, particularly the posterior pair, elongate. Abdomen incurved, and of a dark rufo-testaceous colour beneath.
Hab. Brazil. (Coll. W. W. Saunders, Esq.)

11. Augochlora Daphnis, n. s.

Male. Length 3 lines.—Brilliant green, head very minutely and closely punctured, the clypeus much produced, coarsely punctured and shining, its anterior margin, the labrum and mandibles yellow, as well as the flagellum beneath. The disk of the thorax not so finely punctured as the thorax; the base of the metathorax enclosed by a sharp curved carina, the enclosure has a rugose radiating striation, the sides and truncation closely punctured; tegulæ pale testaceous, wings hyaline, tibiæ and tarsi rufo-piceous. Abdomen finely punctured, thinly covered with short pale pubescence, the apical margins of the segments dark rufo-piceous, very smooth and shining.

Obs. Most closely resembling *A. diversipennis*, male, but distinguished by the striation of the enclosure of the base of the metathorax.
Hab. Monte Video. (Coll. W. W. Saunders, Esq.)

12. Augochlora Artemisia.

Female. Length 5 lines.—Brilliant golden-green, head and thorax very finely and closely punctured, head as wide as the thorax, face broad subquadrate, the eyes scarcely approaching at the base; clypeus broad, coarsely punctured; base of the metathorax not enclosed, smooth and shining, the sides of the truncation have a sharp carina; wings fusco-hyaline; legs green; tarsi testaceous, tinged with green, their pubescence fulvous. Abdomen delicately punctured, the fifth and sixth segments fuscous; beneath rufo-testaceous, tinged with green lustre.

Obs. This species most closely resembles *A. cuprea*, but is at once distinguished by the form of the head and broad face.
Hab. Rio. (Coll. F. Smith.)

13. Augochlora Regina, n. s. B.M.

Female. Length 5 lines.—Bright green, partaking of different shades of blue on the head, of gold on the vertex and disk of the thorax, of blue or golden on the abdomen, as seen in different lights; the clypeus very brilliant, deeply punctured, the rest of the head very finely and closely punctured; margin of the clypeus, labrum and mandibles dark rufo-piceous, nearly black; antennæ black, the flagellum beneath subtestaceous. Thorax, the tegulæ and nervures of the wings, which are sub-

hyaline, dark fuscous, the legs dark metallic green, the tibiæ and tarsi dark rufo-piceous, clothed with black pubescence; the apex of the abdomen covered with black pubescence; the abdomen is highly polished and brilliant, and very closely delicately punctured.

Hab. Jamaica.

14. Augochlora Vesta, n. s. B.M.

Female. Length 3½ lines.—Head and thorax golden-green, very closely and rather strongly punctured, the clypeus has large deep punctures, the flagellum beneath testaceous towards the apex. The base of the metathorax not enclosed, slightly roughened, the truncation shining and having a few scattered punctures, the sides closely and strongly punctured; the outer margin of the tegulæ dark piceous, wings fulvo-hyaline, the nervures testaceous; legs obscure metallic green, covered with dark fuscous pubescence. Abdomen coppery-red, shining and strongly punctured, the apical margins of the segments fringed with short fulvous pubescence; a longer pubescence of the same colour is thinly scattered over the whole abdomen; beneath more or less of a brassy-green, sometimes rufo-testaceous, not metallic.

Hab. Columbia.

15. Augochlora metallica. B.M.

Andrena metallica, *Fabr. Ent. Syst.* ii. 309. 7.
Megilla metallica, *Fabr. Syst. Piez.* p. 332. 19.
Hab. Columbia.

16. Augochlora Floralia, n. s.

Female. Length 3½ lines.—Splendid blue-green, the disk of the thorax having a golden tinge; head very finely and closely punctured; antennæ black, the flagellum fulvous beneath, the mandibles, labrum and margin of the clypeus very dark rufo-testaceous; disk of the thorax finely punctured, interspersed with larger punctures, the anterior portion roughly punctured; tegulæ dark rufo-testaceous; nervures testaceous; wings hyaline, splendidly iridescent; the enclosed space at the base of the metathorax has a number of irregular short shallow radiating striæ, enclosed by a smooth shining ridge; the truncation smooth and shining; the tibiæ and tarsi rufo-testaceous, covered with ochraceous pubescence, beneath with fulvous. Abdomen, towards the apex is a thin scattered ochraceous pubescence, most dense at the sides of the anal rima.

Hab. South America. (Coll. W. W. Saunders, Esq.)

17. Augochlora semiaurata.

Halictus semiauratus, *Spin. Mem. Accad. Torino.* xiii. no. 66.

18. Augochlora cuprea.

Female. Length 4 lines.—Bright green, the vertex finely punctured, the face rugose, and the clypeus covered with large distinct punctures and ciliated with fulvous hairs, the flagellum subtestaceous beneath. Thorax, the disk very closely punctured, the punctures uniting; and having a scattered pale pubescence, longer and denser on the post-scutellum and sides of the metathorax; the base of the metathorax not enclosed, a little roughened below the post-scutellum, beyond which it is smooth and shining; in the middle of the truncation a longitudinal depression, sides of the truncation rounded; wings hyaline, slightly clouded at their apical margins, nervures testaceous, tegulæ dark rufo-testaceous, with a tinge of green; legs green, tarsi ferruginous, their pubescence fulvous. Abdomen ovate, the sides and base covered with long pale pubescence; on the other part it is shorter, the two basal segments fringed with fulvous hairs.

Hab. North America. (Coll. W. W. Saunders, Esq.)

19. Augochlora fulgida, n. s. B.M.

Female. Length 4½ lines.—Brilliant metallic-green, having a blue tinge on the abdomen. Head very closely punctured, the clypeus coarsely punctured, the face below the insertion of the antennæ more deeply punctured than the vertex. Thorax, the disk closely punctured, the punctures large and shallow in the centre; base of the metathorax enclosed, the enclosed space finely roughened, the truncation covered with large shallow punctures; the tegulæ dark testaceous, having a green reflection; wings fulvo-hyaline, nervures ferruginous; legs green, covered above with a fulvo-fuscous pubescence, bright fulvous on the tarsi beneath. Abdomen finely but distantly punctured; beneath green, the margins of the segments dark rufo-fuscous.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

20. Augochlora splendida, n. s. B.M.

Female. Length 3¼ lines.—Golden-green, antennæ and eyes black, the clypeus and lower parts of the face coarsely sculptured, towards the vertex more finely so, the punctures running into each other. Thorax, similarly sculptured to the vertex of the head, and having a few scattered fulvous hairs; metathorax not distinctly enclosed at the base, the sides roughly sculptured; apical joints of the tarsi testaceous, the posterior tibiæ, the in-

termediate and posterior tarsi, covered above with fuscous pubescence, beneath it is fulvous; wings hyaline, the tegulæ testaceous on the outer margin, the nervures pale testaceous, costal nervure ferruginous. Abdomen ovate, thinly scattered over with griseous pubescence; at the basal margins of the second and third segments a fascia of yellow pubescence; the basal segment more strongly punctured than the rest of the abdomen.

Obs. This species most closely resembles *A. diversipennis*, but independent of other differences, the legs are black and the basal segment of the abdomen is longer.

Hab. Mexico.

21. Augochlora labrosa. B.M.

Halictus labrosus, *Say, Bost. Journ. Nat. Hist.* i. 394. 3.

Hab. Mexico; North America.

22. Augochlora radiata.

Halictus radiatus, *Say, Bost. Journ. Nat. Hist.* i. 394. 2, ♀.

Hab. United States.

23. Augochlora festiva, n. s. B.M.

Female. Length 3¼ lines.—Brilliant green, having a golden tinge on the face and disk of the thorax, the abdomen blue-green; head and thorax closely and finely punctured, the clypeus coarsely so; at the base of the metathorax an enclosed space, the space covered with radiating striæ, margined by a sharp bent ridge; the wings fulvo-hyaline, iridescent, nervures ferruginous; coxæ green, the femora dark rufo-testaceous, the tibiæ and tarsi bright ferruginous, their pubescence fulvous, in certain lights having a silvery brightness. Abdomen beneath dark rufo-piceous.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

24. Augochlora gratiosa, n. s. B.M.

Female. Length 3 lines.—Brilliant green, the head closely and finely punctured, the clypeus much produced and coarsely punctured at the apex, flagellum fulvous beneath; disk of the thorax strongly and very closely punctured; the base of the metathorax not distinctly enclosed, rugose-striate, having behind a waved ridge, the truncation transversely roughened. Thorax beneath roughened with uniting punctures; wings subhyaline, nervures rufo-testaceous; legs testaceous, the coxæ and femora having a green reflection; apical joints of the tarsi ferruginous,

the pubescence pale, having a silvery brightness in certain lights; base of the abdomen covered with a white pubescence, which is also very thinly scattered over the whole abdomen.

Hab. Georgia.

25. Augochlora viridula, n. s. B.M.

Male. Length 3¼ lines.—Golden-green, head very closely and finely punctured, the clypeus coarsely so, labrum and mandibles rufo-piceous, flagellum testaceous beneath. Thorax, the outer margin of the tegulæ and nervures of the wings pale testaceous, the wings hyaline, iridescent; base of the metathorax roughened by an irregular radiating striation, not distinctly enclosed, sides of metathorax closely and strongly punctured, as well as the disk of the thorax; legs green, the tarsi pale testaceous yellow. Abdomen strongly but not closely punctured, particularly at the base, very thinly covered with short pale yellow pubescence; margins of the two basal segments slightly depressed and ciliated with short pale yellow hairs.

Obs. From the close similarity this is probably the male of *A. lucidula.*

Hab. Trenton Falls, N. America. (E. Doubleday, Esq.)

26. Augochlora fervida. B.M.

Male. Length 3–4 lines.—Blue-green, head very finely and closely punctured, having large deep punctures on the clypeus, flagellum subtestaceous beneath. Thorax strongly and very closely punctured; wings hyaline, the nervures and outer margin of the tegulæ pale testaceous; base of the metathorax roughened, not distinctly enclosed, the sides strongly punctured; legs green, the tarsi pale testaceous and covered with pale yellow pubescence; the legs fringed with long white pubescence; the tubercles behind, the post-scutellum, and sides of the metathorax covered with white pubescence. Abdomen elongate-ovate, strongly punctured and covered with short pale pubescence, the margins of the two basal segments fringed with the same.

Obs. This species resembles *A. viridula*; it is however very distinct, the colour of the pubescence is different and much more dense, the abdomen is much more closely punctured, and the golden colouring is absent in this species.

Hab. North America.

27. Augochlora lucidula, n. s. B.M.

Female. Length 3½ lines.—Golden or blue-green, head very closely and finely punctured, some large deep punctures on the

clypeus, its anterior margin, labrum and mandibles dark rufo-piceous, the flagellum testaceous beneath. Thorax, the disk very closely covered with punctures of different sizes, towards the sides being finer than those down the centre; metathorax at the base shining, slightly roughened immediately below the post-scutellum, the sides strongly punctured and covered with long pale pubescence; wings hyaline, the nervures and outer margin of the tegulæ pale testaceous; legs golden-green, with a testaceous hue; tarsi testaceous, the basal joint having a green tinge above, covered with pale pubescence, the posterior pair densely covered with pale pubescence, the floccus white. Abdomen thinly covered with pale pubescence, beneath rufo-testaceous, the second, third and fourth segments having a bright golden hue.

Hab. North America.

28. Augochlora pura. B.M.

Halictus purus, *Say, Bost. Journ. Nat. Hist.* i. 395. 4.

Hab. United States; Trenton Falls; Mount Pleasant, Ohio; Nova Scotia. (E. Doubleday and G. Barnston, Esqrs.)

29. Augochlora aurata, n. s. B.M.

Female. Length $2\frac{1}{4}$ lines.—Green, the thorax and abdomen having a golden lustre; the face finely rugose; the vertex closely and finely punctured; the clypeus produced, covered with large punctures; the apex, labrum, and mandibles at their apex ferruginous, the flagellum beneath testaceous. Thorax very closely and finely punctured; base of the metathorax has an enclosed space finely granulated and surrounded by a sharp curved ridge; wings hyaline and iridescent, nervures and tegulæ pale testaceous; legs rufo-testaceous. Abdomen thinly covered with short pale pubescence, beneath rufo-testaceous.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

30. Augochlora sumptuosa, n. s. B.M.

Female. Length $4\frac{1}{4}$ lines.—Bright golden-green, head and thorax very closely and finely punctured, the clypeus covered with large deep punctures, labrum and mandibles rufo-piceous, the latter tinged with green at their base; the base of the metathorax enclosed by an arched ridge, the enclosed space granulated, the sides of the truncation margined by sharp carinæ; wings subhyaline, nervures testaceous, tegulæ coppery-green; legs green, tarsi fulvo-testaceous, the pubescence fulvous. Ab-

domen of a silky texture, thinly covered with a short indistinct pale pubescence; beneath rufo-testaceous, tinged with green.
Hab. North America. (E. Doubleday, Esq.)

Genus 17. OXYSTOGLOSSA, n. g.

F. Smith's MSS. (Details, Plate III.)

The eyes emarginate or subreniform; thorax globose; superior wings having one marginal and three submarginal cells, the first submarginal cell as long as the second and third, the first recurrent nervure uniting with the second transverse cubital nervure. Mentum elongate, one-fifth shorter than the labium, paraglossæ short and obtuse at their apex; labium very long and spiral, pointed at the apex; labial palpi four-jointed, first joint about the length of the two following, the apical joint clavate, obtuse at the apex. Maxillæ elongate, the terminal lobe about one-fourth of its entire length. Maxillary palpi six-jointed, terminal joint obtuse:—other characters as in the genus *Augochlora*.

1. Oxystoglossa decorata, n. s. B.M.

Female. Length $2\frac{1}{4}$ lines.—Head and thorax green, very finely and closely punctured; clypeus very convex, much produced, truncate and rugose towards the apex. Thorax closely and finely punctured; base of the metathorax not enclosed, transversely roughened in the middle and obliquely striated on each side, beyond which is a smooth shining space; wings subhyaline, iridescent, nervures testaceous; legs testaceous, coxæ tinged with blue. Abdomen bright violet, margins of the segments slightly piceous, beneath rufo-testaceous.
Hab. Jamaica.

Genus 18. MEGALOPTA, n. g.

F. Smith's MSS. (Details, Plate III.)

Head as wide as the thorax, eyes emarginate, ocelli very large, placed in a triangle on the vertex, the posterior pair on a line with the vertex of the eyes; the basal joint of the antennæ more than one-third of the entire length, or as long as the seven basal joints of the flagellum; tongue elongate, the apex acute, about one-third longer than the mentum; labial palpi four-jointed, the basal joint as long as the two following, the apical joint cylindric and acute at the apex; the paraglossæ lanceolate, about the same length as the labial palpi. Maxillary palpi six-jointed, nearly one-third longer than the apical lobe of the maxillæ. Labrum

nearly triangular, produced in the form of a beak, having a convex space at the base, from which an elevated carina passes forwards to the apex; the carina broadest at its base, in which is a deep fossulet. Thorax globose, the superior wings having one marginal and three submarginal cells, the second being in the form of an oblong square placed a little obliquely and receiving the first recurrent nervure near or at its apex; the second submarginal cell also receives near its apex the second recurrent nervure. Abdomen ovate, the fifth segment having a central rima in the female.

1. Megalopta bituberculata.

Male. Length 4½ lines.—Head, the vertex black, the face below the insertion of the antennæ rufo-testaceous and covered with pale fulvous pubescence, the mandibles rufo-testaceous, their apex ferruginous; antennæ fulvous, slightly fuscous above. Thorax testaceo-ferruginous, having two longitudinal pale indistinct stripes on the disk; the scutellum on each side raised into a somewhat conical tubercle; beneath the post-scutellum the base of the metathorax has a space enclosed by an arched carina; beneath covered with pale pubescence; wings hyaline, nervures ferruginous; legs pale testaceous. Abdomen ferrugineo-testaceous, smooth and shining, the margins of the segments paler; at the base and towards the apex is a little pale fulvous pubescence.

Hab. Brazil. (Coll. F. Smith.)

2. Megalopta Idalia, n. s. B.M.

Halictus amœnus, *Spin. Mem. Accad. Torino*, xiii. ?

Female. Length 5–6 lines.—Head and disk of the thorax brassy-green; antennæ, margin of the clypeus, labrum and mandibles ferruginous, the latter black at their tips, the clypeus roughly, but the head otherwise finely and closely punctured. Thorax very finely punctured; the metallic portion of the disk extends to the post-scutellum, beyond which the thorax is ferruginous, the sides beneath the wings being suffused with metallic green; the tegulæ and legs testaceo-ferruginous, the neuration of the wings of the same colour; wings hyaline. Abdomen testaceo-ferruginous, having a scattered fulvous pubescence, and being of a paler colour beneath.

Male.—This sex corresponds in every particular of colour and sculpture, the apical joints of the antennæ being fuscous above, the extreme apex ferruginous, the basal joint being pale testaceous beneath.

Hab. Brazil; banks of the Amazon and Para.

Genus 19. CALLOMELITTA, n. g.

F. Smith's MSS. (Details, Plate IV.)

Head transverse, the ocelli placed in a slight curve on the vertex; labium obtuse, the paraglossæ very short and rounded; the labial palpi four-jointed, the joints nearly of equal length, the basal joint a little the longest; the maxillary palpi six-jointed, elongate, being three-fourths of the length of the maxillæ, exclusive of the terminal lobe; the latter being short, somewhat heart-shaped, its margin ciliated with long hairs. Mandibles short, stout and tridentate; the superior wings having one marginal and three submarginal cells, the first submarginal cell as long as the two following, the marginal cell nearly as long as the three submarginal cells united; the posterior legs furnished with a flocculus and scopa and the abdomen with an anal fimbria.

1. CALLOMELITTA PICTA, n. s. B.M.

Female. Length 5 lines.—Head dark blue, coarsely punctured; antennæ black, the flagellum rufo-testaceous beneath. Thorax black, the disk, scutellum and a large patch beneath the wings red, the punctures distant; at the base of the metathorax is a large enclosed smooth space, which has some short striæ at the anterior margin; wings fusco-ferruginous, subhyaline, and having a purple lustre, the pubescence on the legs silvery-white, the spines at the apex of the tibiæ white. Abdomen bright shining blue, having a purple tinge, the anal fimbria black.

Male very similar to the female, but differs in having the antennæ nearly as long as the head and thorax, in the absence of the red spot beneath the wings, in having the scutellum black and a broad black stripe down the middle of the disk of the thorax; abdomen elongate and black.

Hab. Van Diemen's Land.

Genus 20. AGAPOSTEMON.

(Details, Plate IV.)

Head subtriangular; antennæ elongate in the males; the labrum transverse and concave in the females, produced into an elongated lobe, which is sublanceolate and closely fringed at the sides with stout flat hairs; the apical half of the lobe is produced into an elevated carina, which passes off in an oblique direction to the margin on each side; the labrum of the males transverse, very convex and divided by a shallow groove in the centre, produced in front into an angular lobe distantly ciliated on its anterior margin. Mentum elongate, in the females more than four times the length of the labium; in the males the labium is about

half the length of the mentum; the paraglossæ about half the length of the labium; labial palpi four-jointed; maxillary palpi six-jointed, the basal joint of the former as long as the three following; the maxillary have all the joints of about equal length; the wings as in the genus *Halictus*. Abdomen in the females furnished with an anal rima.

Obs. M. Guérin has indicated the separation of these insects from the genus *Halictus*, and has proposed the name *Agapostemon*, but without giving the generic characters.

1. AGAPOSTEMON NIGRICORNIS. B.M.

Andrena nigricornis, *Fabr. Ent. Syst.* ii. 313. 28, ♂.
Andrena virescens, *Fabr. Ent. Syst.* ii. 314. 29, ♀ (*Mus. Dom. Banks.*).
Centris nigricornis, *Fabr. Syst. Piez.* p. 360. 33.
Cocqueb. Illus. t. 25. f. 7.
Megilla virescens, *Fabr. Syst. Piez.* p. 333. 23.
Hab. Mount Pleasant, Ohio; Wilmington, Delaware. (E. Doubleday, Esq.)

2. AGAPOSTEMON TRICOLOR. B.M.

Halictus tricolor, *St. Farg. Hym.* ii. 289. 33, ♂.
Hab. N. America; Mount Pleasant, Ohio. (E. Doubleday, Esq.)

3. AGAPOSTEMON ÆRUGINOSUS, n. s. B.M.

Female. Length 5 lines.—Golden-green, the abdomen more or less tinged with blue; the face roughened with confluent punctures; the clypeus most strongly rugose, its apical margin as well as the labrum and mandibles rufo-testaceous, the latter ferruginous at the tips; the flagellum rufous beneath. Thorax truncate, finely roughened by confluent punctures; base of the metathorax not enclosed, strongly rugose; wings rufo-hyaline, the tegulæ and nervures pale testaceous, the inner margins of the former green, apex of the wings clouded; legs rufo-testaceous, their pubescence beneath fulvous, on the intermediate and posterior tibiæ above fuscous. Abdomen ovate, very minutely and closely punctured; the basal margins of the second, third and fourth segments depressed, sparingly covered with short griseous downy pubescence, which is longest and most dense at the sides; the fifth and apical segment covered with dark fuscous pubescence; beneath rufo-testaceous, having a green tinge, margins of the segments fringed with fulvous pubescence.
Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

4. AGAPOSTEMON PULCHRA, n. s. B.M.

Female. Length 4 lines.—Entirely of bright golden-green, the head and thorax finely roughened with confluent punctures, and thinly covered with griseous pubescence, most dense on the sides of the metathorax; the wings hyaline, nervures and tegulæ testaceous; base of the metathorax rugose, truncate; legs rufo-testaceous, covered with a griseous pubescence, the tarsi beneath with fulvous. Abdomen finely and closely punctured, the margins of the segments depressed; sides of the abdomen covered with long griseous pubescence, the apex dark fuscous.

Obs. This species closely resembles *A. æruginosus*, but is uniformly of a smaller size, its wings are hyaline, and the abdomen is not tinged with blue.

Hab. North America; California.

5. AGAPOSTEMON RHOPALOCERA, n. s.

Male. Length 3½ lines.—Head and thorax golden-green, covered with minute confluent punctures, the face, cheeks and sides of the thorax thickly covered with pale yellow pubescence; the scape in front, the labrum and mandibles yellow, the flagellum beneath pale fulvous; antennæ longer than the head and thorax, the two apical joints clavate, the inner margin of the club being sharp or carinate; above the four or five basal joints have more or less of a fuscous stain, the club black, the intermediate joints ferruginous; the tegulæ, extreme base of the wings and stigma yellow; the legs yellow, the base of the femora and knees more or less ferruginous, posterior coxæ green above. Abdomen black above, yellow beneath, on the middle of the basal segment and at the base of the second and third a transverse yellow band, scarcely visible at the base of the fourth segment, the extreme apex yellow.

Hab. Mexico. (Coll. F. Smith.)

6. AGAPOSTEMON NASUTUS, n. s. B.M.

Male. Length 3½ lines.—Head and thorax golden-green, covered with minute confluent punctures, the antennæ as long as the head and thorax, the scape yellow in front, the flagellum pale fulvous beneath, the anterior margin of the clypeus bent under, notched in the middle, very pale testaceous, rounded on each side; the labrum and mandibles yellow, the latter ferruginous at their apex. Wings hyaline, the tegulæ, extreme base of the wings and the stigma yellow; base of the metathorax rugose; legs yellow, the intermediate and posterior coxæ, trochanters and base of the femora black. Abdomen black, on the middle of the

basal segment a broad pale yellow fascia, the base of all the segments yellow; base and sides of the abdomen covered thinly with pale yellow pubescence.
Hab. Mexico.

7. AGAPOSTEMON FEMORALIS.

Andrena femoralis, *Guérin, Icon. R. Anim.* p. 447. t. 73. f. 1.
Hab. Cuba.

Genus 21. NOMIA.

(Details, Plate IV.)

Andrena, pt., *Fabr. Ent. Syst.* ii. 311, 1793.
Eucera, pt., *Fabr. Ent. Syst. Supp.* p. 278, 1798.
Megilla, pt., *Fabr. Ent. Syst.* ii. 311, 1793.
Lasius, pt., *Panz. Faun. Germ. Fas.* 89, 1802–5.
Nomia, *Latr. Hist. Nat. Ins.* 1804.

Obs. Only twenty-three species are enumerated in the present Catalogue, although there are about twenty in the Museum Collection alone undescribed, and probably as many more in other cabinets; but these will be included in a forthcoming Monograph on the Genus by Mr. Westwood, and given in a Supplement to this Catalogue.

1. NOMIA DIVERSIPES. B.M.

Nomia diversipes, *Latr. Gen. Crust. Ins.* iv. 155. t. 14. f. 8.
Oliv. Ency. Méth. viii. 376. 4.
St. Farg. Hym. ii. 293. 3.
Hab. South of France; Italy.

2. NOMIA DIFFORMIS.

Lasius difformis, *Panz. Faun. Germ.* 89. 15.
Jurine, Hym. ♂.
Andrena humeralis, *Jurine, Hym.* t. 14.
Hab. Germany.

3. NOMIA BISPINOSA.

Nomia bispinosa, *Brullé, Exp. Sc. Morée*, iii. 348. 767.
Hab. The Morea.

4. NOMIA ARMATA.

Nomia armata, *Oliv. Ency. Méth.* viii. 376. 1.
Hab. Arabia.

5. Nomia unidentata.

Nomia unidentata, *Oliv. Ency. Méth.* viii. 376. 2.
Hab. Arabia.

6. Nomia lobata.

Nomia lobata, *Oliv. Ency. Méth.* viii. 377. 5.
Hab. Hamadan, Persia.

7. Nomia ruficornis.

Nomia ruficornis, *Spin. Ann. Soc. Ent. Fr.* vii. 514. 61.
Hab. Egypt.

8. Nomia rufiventris.

Nomia rufiventris, *Spin. Ann. Soc. Ent. Fr.* vii. 514. 60.
Hab. Egypt.

9. Nomia albo-cincta.

Nomia albo-cincta, *Lucas, Explo. Sc. Alger. Zool.* iii. 187. 102.
Hab. Algeria.

10. Nomia perforata.

Nomia perforata, *Lucas, Explo. Sc. Alger. Zool.* iii. 185. 100. t. 7. f. 3.
Hab. Algeria.

11. Nomia flavilabris.

Nomia flavilabris, *Lucas, Explo. Sc. Alger. Zool.* iii. 186. 101. t. 7. f. 4.
Hab. Algeria.

12. Nomia nasalis. B.M.

Nomia nasalis, *Westw. MSS. ined.* (type ♂).
Hab. India.

13. Nomia iridescens. B.M.

Nomia iridescens, *Westw. MSS. ined.* (type ♂ ♀).
Hab. East India.

14. Nomia Elliotii. B.M.

Nomia Elliotii, *Westw. MSS. ined.* (type ♂).
Hab. India.

15. Nomia crassipes. B.M.

Eucera crassipes, *Fabr. Ent. Syst. Supp.* p. 278. 9; *Syst. Piez.* p. 384. 10.
Nomia crassipes, *Latr. Gen. Crust. Ins.* iv. 155.
Hab. India; Tranquebar.

16. Nomia curvipes.

Andrena curvipes, *Fabr. Ent. Syst.* ii. 310. 14.
Megilla curvipes, *Fabr. Syst. Piez.* p. 330. 8.
Nomia curvipes, *Oliv. Ency. Méth.* viii. 377. 6.
Hab. Tranquebar.

17. Nomia Oxybeloides. B.M.

Nomia Oxybeloides, *Westw. MSS. ined.* (type ♂).
Hab. India.

18. Nomia strigata.

Andrena strigata, *Fabr. Ent. Syst.* ii. 311. 16.
Megilla strigata, *Fabr. Syst. Piez.* p. 331. 10.
Nomia strigata, *St. Farg. Hym.* ii. 291. 1.
Hab. India; Java.

19. Nomia Silhetica. B.M.

Nomia Silhetica, *Westw. MSS. ined.* (type ♂ ♀).
Hab. Northern India.

20. Nomia capitata. B.M.

Nomia capitata, *Westw. MSS. ined.* (type).
Hab. N. India.

21. Nomia rustica. B.M.

Nomia rustica, *Westw. MSS. ined.* (type ♂).
Hab. Ceylon.

22. Nomia dorsalis. B.M.

Nomia dorsalis, *Westw. MSS. ined.* (type ♀).
Hab. China.

23. Nomia? heteropoda.

Nomia heteropoda, *Say, Nar. Exped. St. Peter's River, Append.* p. 81.
Hab. North America.

Genus 22. ANCYLA.

Ancyla, *St. Farg. Hym.* ii. 294.

1. Ancyla Oraniensis.

Ancyla Oraniensis, *St. Farg. Hym.* ii. 294. 1.
Lucas, Explo. Sc. Alger. iii. 188. 103.
Hab. Algeria.

Genus 23. ANDRENA.

(Details, Plate V.)

Apis, pt., *Linn. Syst. Nat.* i. 953, 1766.
Andrena, pt., *Fabr. Syst. Ent.* p. 376, 1793.
Nomada, pt., *Fabr. Ent. Syst.* ii. 345, 1793.
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 140, 1802.

1. Andrena Hattorfiana. B.M.

Nomada Hattorfiana, *Fabr. Ent. Syst.* ii. 349. 14, ♀.
Andrena equestris, *Panz. Faun.Germ.* 46. 17.
Andrena Hattorfiana, *Fabr. Syst. Piez.* p. 325. 14.
Spin. Ins. Ligur. fasc. 1. p. 121. 7.
St. Farg. Hym. ii. 254. 25.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 208. 1.
Melitta Lathamana, *Kirby, Mon. Ap. Angl.* ii. 83. 38.
Melitta hæmorrhoidalis, *Kirby, Mon. Ap. Angl.* ii. 141. 81 (var.).
Andrena hæmorrhoidalis, *Smith, Zool.* v. 1664. 1.
Andrena 4-punctata, *Fabr. Syst. Piez.* p. 324. 11, ♂.
Hab. Britain; France; Germany; Albania; Polish Ukraine; Denmark; Sweden; Finland.

2. Andrena Rosæ. B.M.

Andrena Rosæ, *Panz. Faun. Germ.* 74. 10.
Spin. Ins. Ligur. fasc. 3. p. 192. 19, ♀.
Smith, Zool. v. 1665. 2.
Andrena Austriaca, *Panz. Faun. Germ.* 53. 19, ♂.
Melitta Rosæ, *Kirby, Mon. Ap. Angl.* ii. 83. 39, ♀ var. β.
Melitta zonalis, *Kirby, Mon. Ap. Angl.* ii. 87. 40, ♂.
Andrena florea, *St. Farg. Hym.* ii. 259. 32?
Hab. Britain; France; Germany.

3. ANDRENA EXIMIA. B.M.

Andrena eximia, *Smith, Zool.* v. 1930. 70, ♂.
Andrena Rosæ, *Smith, Zool.* v. 1665. 2, ♀, not var. 2, 3, 4, not *Panz.*
Andrena spinigera, *Smith, Zool.* v. 1670. 7, ♂, var. 3, not *Kirby.*
Andrena eximia, *Smith, Zool.* vi. 2211, ♀.
Hab. Britain; France; Germany.

4. ANDRENA RUBRICATA. B.M.

Melitta Rosæ, *Kirby, Mon. Ap. Angl.* ii. 85, var. δ, ε, ♀, and the ♂ described.
Andrena rubricata, *Smith, Zool.* v. 1666. 3.
Hab. Britain; France.

5. ANDRENA FEROX.

Andrena ferox, *Smith, Zool.* v. 1670. 8.
Hab. Britain. (Coll. F. Smith.)

6. ANDRENA CETII. B.M.

Apis Cetii, *Schrank, Ins. Aust.* p. 405. 818, ♀.
Andrena marginata, *Fabr. Ent. Syst.* ii. 309. 10, ♀.
Andrena marginata, *Panz. Faun. Germ.* 72. 15, ♀.
Melitta Schrankella, *Kirby, Mon. Ap. Angl.* ii. 90. 42, ♀.
Andrena marginata, *St. Farg. Hym.* ii. 255. 26, ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 209. 2; *Revis.* p. 251. 4.
Andrena Cetii, *Smith, Zool.* v. 1668. 6, ♀ ♂.
Hab. Britain; France; Germany; Austria; Denmark; Sweden.

7. ANDRENA CINGULATA. B.M.

Nomada cingulata, *Fabr. Ent. Syst.* ii. 349. 15, ♀.
Rossi, Mant. p. 326.
Apis albilabris, *Panz. Faun. Germ.* 56. 23, ♂.
Apis sphegoides, *Panz. Faun. Germ.* 56. 24, ♀.
Andrena sphegoides, *Spin. Ins. Lig.* fasc. 1. p. 121. 6.
Melitta cingulata, *Kirby, Mon. Ap. Angl.* ii. 88. 41, ♂ ♀.
Andrena cingulata, *St. Farg. Hym.* ii. 257. 29.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. p. 210. 3; *Revis.* p. 251. 5.
Smith, Zool. v. 1668. 5.
Hab. Britain; France; Sweden; Denmark.

8. ANDRENA DECORATA.

Andrena decorata, *Smith, Zool.* v. 1667. 4.
Hab. Britain. (Coll. F. Smith.)

9. ANDRENA SPINIGERA. B.M.

Melitta spinigera, *Kirby, Mon. Ap. Angl.* ii. 123. 63, ♂.
Andrena spinigera, *Smith, Zool.* v. 1669. 7, not var. 3, ♂ ♀.
Hab. Britain.

10. ANDRENA CINERARIA. B.M.

Apis cineraria, *Linn. Faun. Suec.* p. 420. 1688, *&* *Cab. Mus. Linn. Soc.*
Fabr. Ent. Syst. ii. 329. 67.
Apis atra, *Christ. Hym.* p. 174. t. 14. f. 1.
Panz. Faun. Germ. 56. 14.
Apis cinerea, *Fourc. Ins. Paris*, ii. 444. 8.
Melitta cineraria, *Kirby, Mon. Ap. Angl.* ii. 98. 47.
Andrena cineraria, *Latr. Hist. Nat.* xiii. 362. 1.
Spin. Ins. Lig. fasc. 1. p. 117. 51.
St. Farg. Hym. ii. 238. 6.
Nyland. Apis Boreal. Act. Soc. Sc. Fenn. i. 211. 6.
Smith, Zool. v. 1735. 14.
Lucas, Explo. Sc. Alger. iii. 169. 58.
Hab. Britain; France; Italy; Germany; Finland; Sweden; Algeria.

11. ANDRENA FLESSÆ. B.M.

Andrena Flessæ, *Panz. Faun. Germ.* 85. 15.
St. Farg. Hym. ii. 249. 19.
Lucas, Explo. Sc. Alger. iii. 172. 65.
Nyland. Revis. Ap. Boreal. p. 256. 6.
Hab. France; Germany; Portugal.

12. ANDRENA BARBAREÆ.

Andrena Barbareæ, *Panz. Faun. Germ.* 94. 10.
Hab. Barbary.

13. ANDRENA PILIPES. B.M.

Apis atra, *Schrank, Ins. Aust.* p. 403. 814?
Andrena pilipes, *Fabr. Mant.* p. 298. 13.
Rossi, Faun. Etrus. ii. 98. 898.
Spin. Ins. Lig. fasc. 3. p. 191. 17.
St. Farg. Hym. ii. 236. 3.
Nyland. Apis Boreal. Act. Soc. Sc. Fenn. i. 210. 4.

Apis carbonaria, *Christ. Hym.* p. 201. t. 17. f. 13.
Andrena carbonaria, *Fabr. Ent. Syst.* ii. 312. 22.
Andrena aterrima, *Panz. Faun. Germ.* 64. 19.
Latr. Hist. Nat. xiii. 363. 3.
Melitta pilipes, *Kirby, Mon. Ap. Angl.* ii. 96. 46, ♀.
Melitta pratensis, *Kirby, Mon. Ap. Angl.* ii. 100. 48, ♂.
Andrena pratensis, *Nyland. Act. Soc. Sc. Fenn.* p. 211. 5, ♂ ♀.
Andrena nitida, *Lucas, Explo. Sc. Alger.* iii. 181. 86, ♂?
Andrena atra, *Smith, Zool.* v. 1734. 13.

Hab. Britain; France; Germany; Italy; Albania; Austria; Denmark; Sweden; Finland; The Canaries; Algeria.

14. ANDRENA COLLARIS. B.M.

Andrena collaris, *St. Farg. Hym.* ii. 237. 4. t. 22. f. 3 ♀, 4 ♂.
Lucas, Expéd. Sc. Alger. iii. 169. 57. t. 5. f. 4.
Andrena holomelana, *St. Farg. Hym.* ii. 234. 1 (var. ?).

Hab. France; Albania; Italy; Sicily; Algeria.

15. ANDRENA FUNEBRIS. B.M.

Andrena funebris, *Panz. Faun. Germ.* fasc. 64. t. 5.
St. Farg. Hym. ii. 247. 16.
Luc. Explo. Sc. Alger. iii. 171. 62.

Hab. Europe; Algeria.

16. ANDRENA BICOLOR. B.M.

Andrena bicolor, *Fabr. Ent. Syst.* ii. 310. 12, ♀.
St. Farg. Hym. ii. 243. 12, ♀.
Luc. Explo. Sc. Alger. iii. 180. 82.
Andrena lucida, *Panz. Faun. Germ.* 56. 1, ♀.
Melitta Clarkella, *Kirby, Mon. Ap. Angl.* ii. 130. 69, ♀.
Andrena dispar, *Zett. Ins. Lapp.* p. 460. 2, ♀.
Andrena Clarkella, *Smith, Zool.* v. 1747. 36, ♂ ♀.
Nyland. Apis Boreal. Act. Soc. Sc. Fenn. p. 212. 7, ♀.

Hab. Britain; France; Germany; Lapland; Denmark; Sweden; Nova Scotia; Algeria.

Obs. The specimens from Nova Scotia differ from our British examples in having the pubescence of the thorax less brightly fulvous and that of the face not so intensely black.

17. ANDRENA FULVA. B.M.

Apis fulva, *Schrank, Ins. Aust.* p. 400. 805.
Apis vestita, *Fabr. Ent. Syst.* ii. 329. 65.
Panz. Faun. Germ. 55. 9.
Apis vulpina, *Christ. Hym.* p. 161. 12, 13.

Melitta fulva, *Kirby*, *Mon. Ap. Angl.* ii. 128. 68, ♀.
Melitta armata, *Kirby*, *Mon. Ap. Angl.* ii. 121. 64, ♂.
Andrena vestita, *Latr. Hist. Nat.* xiii. 362. 2, ♀.
Fabr. Syst. Piez. p. 323. 4, ♀.
Coqueb. Ill. Ic. Ins. p. 25. t. 6. f. 7, ♀.
Spin. Ins. Lig. ii. 191. 4, ♀.
Andrena fulva, *St. Farg. Hym.* ii. 245. 14, ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. p. 214. 10, ♀; *Revis.* p. 252. 8.
Smith, Zool. v. 1746. 35, ♂ ♀.
Luc. Explo. Sc. Alger. iii. 180. 81.

Hab. Britain; France; Italy; Germany; Austria; Finland; Sweden.

18. Andrena Gwynana. B.M.

Melitta Gwynana, *Kirby*, *Mon. Ap. Angl.* ii. 120. 60.
Andrena Gwynana, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 213. 8; *Revis. Ap. Boreal.* p. 253. 12.

Hab. Britain; France; Denmark; Sweden.

19. Andrena æstiva. B.M.

Andrena proxima, *Smith, Zool.* v. 1743. 28, not of *Kirby*.
Andrena consimilis, *Smith, Zool.* vi. 2214.
Andrena æstiva, *Smith, Zool.* vii. *Appen.* p. 60.

Hab. Britain.

20. Andrena pilosula.

Melitta pilosula, *Kirby*, *Mon. Ap. Angl.* ii. 164. 104.
Andrena pilosula, *Smith, Zool.* v. 1926. 65.

Hab. Britain. (Coll. F. Smith.)

21. Andrena lacinia.

Andrena lacinia, *Smith, Zool.* v. 1751. 44.

Hab. Britain. (Coll. F. Smith.)

22. Andrena Aprilina.

Andrena Aprilina, *Smith, Zool.* vi. 2211.

Hab. Britain. (Coll. J. C. Dale, Esq.)

23. Andrena Trimmerana. B.M.

Melitta Trimmera, *Kirby*, *Mon. Ap. Angl.* ii. 116. 57.
Andrena Trimmerana, *Smith, Zool.* v. 1740. 23.
Nyland. Revis. Ap. Boreal. p. 252. 9.

Hab. Britain; France; Belgium; Denmark.

24. Andrena longipes. B.M.

Andrena longipes, *Shuck. MSS.*; *Smith, Zool.* v. 1740. 24, ♂ ♀.
Andrena bucephala, *Steph. Illus. Mand.* vii. *Supp.* 17, var. ♂, t. 43. f. 4.

Hab. Britain.

25. Andrena megacephala, n. s.

Male. Length 5 lines.—Black, head quadrate, twice the width of the thorax; sides of the thorax parallel from the collar to the hinder wings; disk of the thorax smooth and shining, the punctures very delicate and distant; legs nigro-piceous; tarsi rufo-testaceous; wings subhyaline, nervures and stigma dark ferruginous; abdomen wider than the thorax, acute at the base and apex, highly polished and delicately punctured: the margins of the segments laterally have a thin fringe of griseous pubescence.

Hab. South of France. (Coll. F. Smith.)

26. Andrena nitida. B.M.

Apis nitida, *Fourc. Ent. Par.* ii. 104. 51.
Melitta nitida, *Kirby, Mon. Ap. Angl.* ii. 104. 51.
Andrena nitida, *Spin. Ins. Lig.* fasc. 1. p. 122. 8.
St. Farg. Hym. ii. 237. 5.
Smith, Zool. v. 1736. 16.
Nyland. Revis. Ap. Boreal. p. 253. 10 (nec *Fabr. Panz.*).
Andrena consimilis, *Smith, Zool.* v. 1736. 17 (var.).

Hab. Britain; France; Sweden.

27. Andrena thoracica. B.M.

Apis thoracica, *Fabr. Syst. Ent.* p. 383. 31, ♀.
Schrank, Ins. Aust. p. 178. t. 14. f. 6.
Apicis assiduus, *Harris, Expos.* p. 138. t. 40. f. 19.
Apis bicolor, *Christ. Hym.* p. 178. t. 14. f. 6, ♂.
Andrena bicolor, *Rossi, Faun. Etrus.* ii. 97. 896.
Panz. Faun. Germ. 65. 19, ♂.
Melitta thoracica, *Mon. Ap. Angl.* ii. 101. 49, ♀.
Melitta melanocephala, *Kirby, Mon. Ap. Angl.* ii. 103. 50, ♂ var.
Andrena thoracica, *Fabr. Syst. Piez.* p. 322. 3.
Spin. Ins. Lig. i. 120. 5.
St. Farg. Hym. ii. 239. 7.
Smith, Zool. v. 1735. 15.

Hab. Britain; France; Germany; Austria; Denmark; Sweden.

28. Andrena vitrea.

Andrena vitrea, *Smith, Zool.* v. 1737. 18.

Hab. Britain. (Coll. F. Smith.)

29. Andrena conjuncta.

Andrena conjuncta, *Smith, Zool.* v. 1744. 31.
Hab. Britain. (Coll. F. Smith.)

30. Andrena bimaculata. B.M.

Melitta bimaculata, *Kirby, Mon. Ap. Angl.* ii. 115. 56.
Andrena bimaculata, *Smith, Zool.* v. 1739. 22.
Hab. Britain.

31. Andrena Mouffetella.

Melitta Mouffetella, *Kirby, Mon. Ap. Angl.* ii. 108. 53.
Andrena Mouffetella, *Smith, Zool.* v. 1738. 20.
Hab. Britain. (Coll. Entomological Society.)

32. Andrena nigroænea. B.M.

Melitta nigroænea, *Kirby*, ii. 109. 54, ♀.
Andrena nigroænea, *Smith, Zool.* v. 1739. 21, ♂ ♀.
Hab. Britain; France.

33. Andrena varians. B.M.

Apis varians, *Rossi, Mant.* p. 317.
Panz. Faun. Germ. 56. 12.
Melitta varians, *Kirby, Mon. Ap. Angl.* ii. 117. 58.
Andrena Lapponica, *Zett. Ins. Lapp.* p. 460. 4?
Andrena varians, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 213. 9; *Revis. Ap. Boreal.* p. 253. 13.
Smith, Zool. v. 1741. 25.
Hab. Britain; France; Germany; Lapland; Denmark; Sweden; Nova Scotia.

34. Andrena helvola. B.M.

Apis helvola, *Linn. Syst. Nat.* i. 955. 16, *& Cab. Mus. Linn. Soc.*
Fabr. Ent. Syst. ii. 310. 11; *Syst. Piez.* p. 326. 21.
Spin. Ins. Lig. fasc. 1. p. 122. 9.
Melitta helvola, *Kirby, Mon. Ap. Angl.* ii. 119. 59. t. 15. f. 9, ♀.
Andrena helvola, *Rossi, Faun. Etrus.* ii. 97. 895.
Smith, Zool. v. 1742. 26, ♂ ♀.
Nyland. Supp. Ap. Boreal. p. 99; *Revis. Ap. Boreal.* p. 254. 16.
Hab. Britain; France; Germany; Italy; Sweden; Finland.

35. Andrena angustior. B.M.

Melitta angustior, *Kirby, Mon. Ap. Angl.* ii. 122. 61.
Andrena angustior, *Smith, Zool.* v. 1745. 32.
Nyland. Revis. Ap. Boreal. p. 254. 17.
Hab. Britain; France; Belgium.

36. Andrena cinerascens.

Andrena cinerascens, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 216. 13.
Hab. Sweden.

37. Andrena obscurata. B.M.

Andrena distincta, *Smith*, v. 1744. 30 (nec *Lucas, Explo. Sc. Alger.*).
Hab. Britain.

38. Andrena fulvago. B.M.

Apis fulvago, *Christ. Hym.* p. 189. t. 16. f. 7, ♀.
Melitta fulvago, *Kirby, Mon. Ap. Angl.* ii. 93. 44.
Andrena fulvago, *St. Farg. Hist. Nat. Ins.* ii. 243. 11.
Smith, Zool. v. 1732. 9.
Nyland. Supp. Ap. Boreal. p. 99; *Revis. Ap. Boreal.* p. 255. 19.
Hab. Britain; France; Sweden.

39. Andrena ruficrus.

Andrena ruficrus, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 217. 14.
Hab. Finland; Lapland; Sweden.

40. Andrena polita.

Andrena polita, *Smith, Zool.* v. 1733. 11.
Hab. Britain. (Coll. F. Smith.)

41. Andrena albicans. B.M.

Apis hæmorrhoidalis, *Christ. Hym.* p. 189. t. 16. f. 8?
Melitta albicans, *Kirby, Mon. Ap. Angl.* ii. 94. 45.
Andrena albicans, *St. Farg. Hist. Nat. Ins.* ii. 242. 10.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 215. 11.
Smith, Zool. v. 1734. 12.
Hab. Britain; France; Finland; Nova Scotia; Denmark; Sweden; Lapland.

42. Andrena fulvescens. B.M.

Melitta fulvescens, *Kirby, MSS.*
Andrena fulvescens, *Smith, Zool.* v. 1732. 10.
Hab. Britain; France; Albania; Portugal.

43. Andrena picipes.

Melitta picipes, *Kirby, Mon. Ap. Angl.* ii. 127. 66.
Andrena picipes, *Smith, Zool.* v. 1746. 34.
Hab. Britain. (Coll. Entomological Society.)

44. Andrena convexiuscula. B.M.

Melitta convexiuscula, *Kirby, Mon. Ap. Angl.* ii. 166. 106.
Andrena convexiuscula, *Smith, Zool.* v. 1927. 66.
Andrena xanthura, *Nyland. Ap. Boreal. Supp.* p. 100.
Hab. Britain; Denmark; Sweden; Finland.

45. Andrena picicornis.

Melitta picicornis, *Kirby, Mon. Ap. Angl.* ii. 123. 62.
Andrena picicornis, *Smith, Zool.* v. 1745. 33.
Hab. Britain. (Coll. Entomological Society.)

46. Andrena nigriceps. B.M.

Melitta nigriceps, *Kirby, Mon. Ap. Angl.* ii. 134. 73, ♀, not the ♂.
Andrena nigriceps, *Smith, Zool.* v. 1749. 40, ♀.
Hab. Britain.

47. Andrena similis. B.M.

Andrena similis, *Smith, Zool.* vii. *App.* p. 60.
Hab. Britain.

48. Andrena Smithella.

Melitta Smithella, *Kirby, Mon. Ap. Angl.* ii. 131. 70.
Andrena Smithella, *Smith, Zool.* v. 1748. 37.
Hab. Britain. (Coll. Entomological Society.)

49. Andrena denticulata.

Melitta denticulata, *Kirby, Mon. Ap. Angl.* ii. 133. 72, ♂.
Melitta Listerella, *Kirby, Mon. Ap. Angl.* ii. 137. 76, ♀.
Andrena Listerella, *Smith, Zool.* v. 1752. 45, ♂ ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 219. 17, ♀ ♂?
Hab. Britain. (Coll. Entomological Society.)

50. Andrena pubescens. B.M.

Apis pubescens, *Fabr. Ent. Syst.* ii. 336. 95, ♂.
Melitta pubescens, *Kirby, Mon. Ap. Angl.* ii. 141. 80, ♂.
Melitta fuscipes, *Kirby, Mon. Ap. Angl.* ii. 136. 75, ♀.
Andrena fuscipes, *Smith, Zool.* v. 1751. 43, ♂ ♀.
Andrena cincta, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 220. 18, ♂ ♀.
Melitta rufitarsis, *Kirby* (var.); *Kirby's MSS. Note, in his own Copy of Mon. Ap. Angl.*
Hab. Britain; France; Sweden; Finland.

51. Andrena atriceps. B.M.

Melitta atriceps, *Kirby, Mon. Ap. Angl.* ii. 114. 55, ♂.
Melitta tibialis, *Kirby, Mon. Ap. Angl.* ii. 107. 52, ♀.
Andrena tibialis, *Smith, Zool.* v. 1737. 19, ♂ ♀.
Hab. Britain.

52. Andrena tridentata.

Melitta tridentata, *Kirby, Mon. Ap. Angl.* ii. 132. 71.
Andrena bidentata, *Smith, Zool.* v. 1749 & vi. 2214.
Hab. Britain. (Coll. Entomological Society.)

53. Andrena Lapponica. B.M.

Andrena Lapponica, *Zett. Ins. Lapp.* p. 460. 4.
Andrena apicata, *Smith, Zool.* v. 1748. 38.
Hab. Britain; Lapland; Sweden; Finland.

54. Andrena fucata.

Andrena fucata, *Smith, Zool.* v. 1743. 28.
Andrena clypeata, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 215. 12; *Revis. Ap. Boreal.* p. 254. 15.
Hab. Britain; Denmark; Sweden; Finland.

55. Andrena vaga.

Andrena vaga, *Panz. Faun. Germ.* 64. 18.
Hab. Austria.

56. Andrena flavipes.

Andrena flavipes, *Panz. Faun. Germ.* 64. 20.
Hab. Austria.

57. Andrena lucida.

Andrena lucida, *Panz. Faun. Germ.* 56. 1.
Spin. Ins. Lig. fasc. 3. p. 192. 18.
Hab. Germany.

58. Andrena dispar.

Andrena dispar, *Zett. Ins. Lappon.* p. 460. 2.
Hab. Lapland; Sweden; Denmark.

59. Andrena Wilkella.

Melitta Wilkella, *Kirby, Mon. Ap. Angl.* ii. 145. 84.
Andrena Wilkella, *Smith, Zool.* v. 1918. 49.
Hab. Britain. (Coll. Entomological Society.)

60. Andrena constricta.

Andrena constrictus, *Smith, Zool.* vii. *App.* 59.
Hab. Britain. (Coll. F. Smith.)

61. Andrena fulvicrus. B.M.

Melitta fulvicrus, *Kirby, Mon. Ap. Angl.* ii. 138. 77, ♂ ♀.
Melitta contigua, *Kirby, Mon. Ap. Angl.* ii. 140. 79, ♂ var.
Andrena fulvicrus, *Smith, Zool.* v. 1916. 46.
Hab. Britain; France; Germany; N. India.

62. Andrena extricata.

Andrena extricatus, *Smith, Zool.* vii. *App.* 59.
Hab. Britain. (Coll. F. Smith.)

63. Andrena dorsata.

Melitta dorsata, *Kirby, Mon. Ap. Angl.* ii. 144. 83.
Andrena dorsata, *Smith, Zool.* v. 1918. 48.
Hab. Britain. (Coll. Ent. Soc.)

64. Andrena Kirbii. B.M.

Andrena Kirbii, *Curtis, Brit. Ent.* iii. 129. t. 125.
Hab. Britain. (Type sp.)

65. Andrena argentata. B.M.

Andrena argentata, *Smith, Zool.* v. 1920. 52.
Andrena barbatula, *Zett. Ins. Lapp.* p. 461. 5?
Hab. Britain; Sweden; Lapland.

66. Andrena barbatula.

Andrena barbatula, *Zett. Ins. Lapp.* p. 461. 5.
Hab. Lapland.

67. Andrena albo-cincta.

Andrena albo-cincta, *Zett. Ins. Lapp.* p. 460. 3.
Hab. Lapland.

68. Andrena Collinsonana. B.M.

Melitta Collinsonana, *Kirby, Mon. Ap. Angl.* ii. 153. 93, ♂.
Melitta proxima, *Kirby, Mon. Ap. Angl.* ii. 146. 85, ♀.
Melitta digitalis, *Kirby, Mon. Ap. Angl.* ii. 159. 99, ♀ var.
Andrena proxima, *Smith, Zool.* v. 1918. 50.
Andrena nitida, *Panz. Faun. Germ.* 56. 2?
Hab. Britain; France; Belgium.

69. Andrena Lewinella.

Melitta Lewinella, *Kirby, Mon. Ap. Angl.* ii. 149. 88, ♂.
Andrena Lewinella, *Smith, Zool.* v. 1923. 57.
Hab. England. (Coll. Ent. Soc.)

70. Andrena combinata. B.M.

Melitta combinata, *Kirby, Mon. Ap. Angl.* ii. 153. 94.
Melitta nudiuscula, *Kirby, Mon. Ap. Angl.* ii. 155. 95, var.
Andrena combinata, *Smith*, v. 1923. 58.
Andrena barbatula, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 218. 16, ♀?
Hab. Britain.

71. Andrena albicrus. B.M.

Melitta albicrus, *Kirby, Mon. Ap. Angl.* ii. 156. 96.
Melitta barbilabris, *Kirby, Mon. Ap. Angl.* ii. 151. 91, var. ♂?
Andrena albicrus, *Smith, Zool.* v. 1924. 59.
Hab. Britain; Sweden; Finland; Lapland.

72. Andrena connectens.

Melitta connectens, *Kirby, Mon. Ap. Angl.* ii. 157. 97.
Andrena connectens, *Smith, Zool.* v. 1924. 60.
Hab. Britain. (Coll. Ent. Soc.)

73. Andrena xanthura. B.M.

Melitta xanthura, *Kirby, Mon. Ap. Angl.* ii. 164. 105, ♀.
Melitta ovatula, *Kirby, Mon. Ap. Angl.* ii. 149. 89, ♂, var.
Melitta contigua, *Kirby, Mon. Ap. Angl.* ii. 140. 79, ♂, var.?

Andrena xanthura, *Smith, Zool.* v. 1928. 67.
Andrena chrysosceles, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 218. 15, ♀.
Hab. Britain; France; Sweden; Finland; Siberia.

74. Andrena fuscata. B.M.

Melitta fuscata, *Kirby, Mon. Ap. Angl.* ii. 167. 107, ♀.
Andrena fuscata, *Smith, Zool.* v. 1929. 68, ♂ ♀.
Hab. Britain.

75. Andrena Afzeliella. B.M.

Melitta Afzeliella, *Kirby, Mon. Ap. Angl.* ii. 169. 108, ♀.
Andrena Afzeliella, *Smith, Zool.* v. 1929. 69, ♂ ♀.
Hab. Britain; France; Belgium; Finland.

76. Andrena chrysosceles. B.M.

Melitta chrysosceles, *Kirby, Mon. Ap. Angl.* ii. 143. 82.
Andrena chrysosceles, *Smith, Zool.* v. 1917. 47.
Nyland. Apum Boreal. Act. Soc. Sc. Fenn. i. 218. 15; *Revis. Ap. Boreal.* p. 257. 26.
Hab. Britain; France; Finland.

77. Andrena labialis. B.M.

Melitta labialis, *Kirby, Mon. Ap. Angl.* ii. 148. 87, ♂.
Andrena labialis, *Smith, Zool.* v. 1921, ♂ ♀.
Nyland. Revis. Ap. Boreal. p. 256. 23.
Andrena separata, *Smith, Zool.* v. 1922. 55, var. ♀.
Hab. Britain; France; Sweden.

78. Andrena Coitana. B.M.

Melitta Coitana, *Kirby, Mon. Ap. Angl.* ii. 147. 86, ♂.
Andrena Coitana, *Smith, Zool.* v. 1919. 51, ♂ ♀ (var.).
Andrena nana, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 221. 19, ♀; *Revis. Ap. Boreal.* p. 258. 30.
Melitta Shawella, *Kirby, Mon. Ap. Angl.* ii. 160. 100, ♀.
Andrena Shawella, *Smith, Zool.* v. 1926. 64.
Hab. Britain; Finland.

79. Andrena clypearis.

Andrena clypearis, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 215. 12.
Hab. Finland; Sweden.

80. Andrena frontalis.

Andrena frontalis, *Smith, Zool.* vii. *App.* 59.
Hab. Britain. (Coll. F. Smith.)

81. Andrena analis. B.M.

Andrena analis, *Panz. Faun. Germ.* 90. 14 ♂, 15 ♀.
Smith, Zool. v. 1920. 53, ♂ ♀.
Andrena tarsata, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 223. 22, ♂; *Revis. Ap. Boreal.* p. 259. 32?
Hab. Britain; France; Germany; Finland.

82. Andrena rufitarsis.

Andrena rufitarsis, *Zett. Ins. Lapp.* p. 461. 6.
Hab. Lapland.

83. Andrena nana. B.M.

Melitta nana, *Kirby, Mon. Ap. Angl.* ii. 161. 102.
Andrena nana, *Smith, Zool.* v. 1925. 62.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 221. 19.
Lucas, Explo. Sc. Alger. iii. 162. 77.
Andrena pygmea, *Brullé, Expéd. Sc. Morée,* p. 359. 792?
Hab. Britain; Finland; Sweden; Greece.

84. Andrena parvula. B.M.

Melitta parvula, *Kirby, Mon. Ap. Angl.* ii. 162. 103.
Melitta minutula, *Kirby, Mon. Ap. Angl.* ii. 161. 101 (var.).
Andrena parvula, *Smith, Zool.* v. 1925. 63.
Nyland. Revis. Ap. Boreal. p. 258. 29.
Andrena subopaca, *Nyland. Ap. Boreal.* p. 221. 19.
Hab. Britain; France; Belgium; Finland; Denmark; Sweden.

85. Andrena cyanescens.

Andrena cyanescens, *Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 259. 31.
Hab. Finland.

86. Andrena Hesperia, n. s. B.M.

Female. Length 4 lines. — Black, the face longitudinally striate, the clypeus rugose, thinly covered on the face and vertex with pale fulvous pubescence, the flagellum rufo-testaceous, slightly fuscous above; thorax thinly covered with pale fulvous pubescence, particularly the disk; tegulæ and nervures of the wings rufo-testaceous; wings hyaline, iridescent and slightly

clouded at their apical margins; legs rufo-piceous, the posterior tibiæ and all the tarsi pale rufo-testaceous, clothed with fulvous pubescence. Abdomen ovate, delicately punctured; apical margins of the segments testaceous, and having a fascia of pale fulvous pubescence, the first and second usually interrupted, on the fifth and sixth segments it is bright fulvous.

Hab. Italy.

87. ANDRENA CAPITALIS, n. s. B.M.

Male. Length 4 lines.—Head as wide as the thorax, densely covered with long erect black hair; the thorax above covered with black hair, that on the sides of the thorax is ochraceous; wings hyaline, the apical margins very slightly clouded, the nervures and stigma ferruginous; all the femora fringed with sooty black pubescence, as well as the anterior tibiæ and the intermediate pair at their base; the legs otherwise covered with pale fulvous pubescence, the apical joints of the tarsi ferruginous. Abdomen ovate, the apex acute; shining and clothed with black pubescence, which is long at the base and apex; the second, third and fourth segments have a little white pubescence on their apical margins laterally; beneath, the margins have a thin fringe of long black hairs.

Hab. Malta.

88. ANDRENA SPECTABILIS, n. s. B.M.

Female. Length 7 lines.—Black, on each side of the face a line of white pubescence, the clypeus coarsely punctured. Thorax, the middle portion from the collar to the post-scutellum shining and coarsely punctured, on each side of which it is much more closely and finely so, giving the sides a subopaque appearance; on the metathorax at its base a triangular defined space, coarsely rugose; sides of the metathorax finely roughened with confluent punctures and fringed with sooty-black pubescence; wings dark fuscous having a purple reflection; legs usually black, or dark rufo-piceous, the claws ferruginous; the pubescence of the legs sooty-black, on the tarsi beneath it is fulvous; the floccus and scopa on the posterior tibiæ in front cinereous or silvery in certain lights. Abdomen shining, particularly at the base, which is less closely punctured than the rest of the abdomen, the apical margins of the segments broadly depressed, the depressed portion being delicately, whilst the intervening space is strongly, punctured; on the apical margins of the second, third and fourth segments laterally a narrow white marginal fringe, the anal fimbria sooty-black.

Hab. Albania.

89. Andrena nigrifrons, n. s.

Female. Length 5½ lines.—Black, the head thickly clothed with black pubescence. Thorax, above clothed with fulvous pubescence, thinly so on the disk, thickly on the sides of the metathorax; the pubescence on the anterior femora and tibiæ is black and on the tarsi beneath fulvous; on the intermediate and posterior legs it is fulvous, all the tarsi and the posterior tibiæ are fulvous; wings hyaline, their apical margins slightly clouded, the nervures ferruginous. Abdomen ovate, the two basal segments clothed with fulvous pubescence, the following with black; the second, third and fourth segments have a marginal fringe of fulvous pubescence, the anal fimbria black.

Male.—Head as wide as the thorax, the clypeus white and having two minute black spots, and a long beard of white pubescence; on the face above, the pubescence is pale fulvous, and close to the margins of the eyes is a little which is black; the thorax is clothed as in the female, but the pubescence is longer and the posterior tibiæ are only ferruginous at their apex; the four basal segments of the abdomen are covered with long pale fulvous pubescence, on the fifth and following segments it is black; on the cheeks, coxæ and trochanters the pubescence is long and pale.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

90. Andrena concinna, n. s.

Female, Length 6½ lines.—Black, the face below the insertion of the antennæ covered with a griseo-fulvous pubescence, the longitudinal depressions at the margins of the eyes covered with a whitish pile; the margin of the vertex fringed with fulvous hairs. Thorax, the disk covered with short fulvous pubescence, at the sides and beneath it is much paler, the tegulæ and nervures of the wings rufo-piceous; wings hyaline and having a slight fulvous tinge, their apical margins faintly clouded; the tibiæ and tarsi above clothed with fulvous pubescence, the apical joints of the tarsi ferruginous, the floccus on the posterior trochanters nearly white. Abdomen elongate-ovate, the apical margins of the segments depressed, and having a fascia of pale fulvous pubescence, the apical fimbria bright fulvous, the segments beneath have an irregular fringe of pale pubescence; the abdomen above is exceedingly closely and finely punctured, giving it a subopake appearance.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

91. Andrena variabilis, n. s. B.M.

Female. Length 5½–6 lines.—Black, the head finely and closely punctured, flagellum ferruginous beneath, the face has a griseous pubescence, the clypeus being naked and strongly punctured. Thorax, above shining, strongly but not very closely punctured, in front and on the margins of the scutellum and post-scutellum a fringe of short ochraceous pubescence, the legs have a pale pubescence having more or less of a yellow tinge; the floccus and scopa on the posterior pair have a glittering silvery lustre, on the tarsi beneath it is fulvous, the apical joints of the tarsi pale rufo-testaceous, as are also the tegulæ and nervures of the wings, the latter hyaline; the apical margins of the abdominal segments have a fascia of white pubescence, usually interrupted on the first: the anal fimbria has an intermixture of reddish brown hairs.

Male. Length 5 lines.—Black, the clypeus and a large patch at the sides white; the face broad, and having a thin hoary pubescence. The antennæ ferruginous, more or less fuscous above, in other respects resembling the female.

Obs. Both the sexes of this species vary in being sometimes more or less red, the female is sometimes entirely so, or having only a dark stain on the disk of the thorax; the dark specimens usually have the clypeus red, and are sometimes reddish beneath. The male varies in having the abdomen sometimes entirely red, or having only one or two apical segments dark with the base more or less also dark; these varieties have the legs red.

Hab. Albania.

92. Andrena lanuginosa.

Andrena lanuginosa, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 137. 25.

Hab. Spain.

93. Andrena cinerea.

Andrena cinerea, *Brullé, Expéd. Sc. Morée*, iii. 357. 788.
Luc. Explo. Sc. Algér. iii. 181. 84.

Hab. Morea; Algeria.

94. Andrena clypeata.

Andrena clypeata, *Brullé, Expéd. Sc. Morée*, iii. 358. 791.
Luc. Explo. Sc. Algér. iii. 180. 80.

Hab. Morea; Algeria.

95. Andrena dimidiata.

Andrena dimidiata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 353. 781.

Hab. Morea.

96. Andrena dorsalis.

Andrena dorsalis, *Brullé, Expéd. Sc. Morée*, iii. 358. 79. *Luc. Explo. Sc. Algér.* iii. 180. 81.

Hab. Morea; Algeria.

97. Andrena fulvitarsis.

Andrena fulvitarsis, *Brullé, Expéd. Sc. Morée, Zool.* iii. 355. 784.

Hab. Morea.

98. Andrena tricincta.

Andrena tricincta, *Brullé, Expéd. Sc. Morée*, iii. 356. 785. *Luc. Explo. Sc. Algér.* iii. 180. 83.

Hab. Morea; Algeria.

99. Andrena pallidi-cincta.

Andrena pallidi-cincta, *Brullé, Expéd. Sc. Morée, Zool.* iii. 358. 790.

Hab. Morea.

100. Andrena pallens.

Andrena pallens, *Brullé, Expéd. Sc. Morée, Zool.* iii. 357. 789.

Hab. Morea.

101. Andrena morio.

Andrena morio, *Brullé, Expéd. Sc. Morée, Zool.* iii. 353. 780. t. 49. f. 8, 9.

Hab. Morea.

102. Andrena fimbriata.

Andrena fimbriata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 355. 783. t. 49. f. 11.

Hab. Morea.

103. Andrena bicolorata.

Andrena bipartita, *Brullé, Hist. Nat. Il. Canar.* ii. 87. 27. t. 3. f. 11 (nec *St. Farg.*).

Hab. Canary Islands.

104. Andrena chalcogastra.

Andrena chalcogastra, *Brullé, Hist. Nat. Il. Canar.* ii. 87. 28. t. 3. f. 12.

Hab. Canary Islands.

105. Andrena xanthoscelis.

Andrena xanthoscelis, *Brullé, Hist. Nat. Il. Canar.* ii. 86. 25. t. 3. f. 10.

Hab. Canary Islands.

106. Andrena ruficornis, n. s.

Female. Length 6½ lines.—Black, the antennæ bright ferruginous, the face below the insertion of the antennæ clothed with ferruginous pubescence, the clypeus naked; the thorax has a little ferruginous pubescence in front, at the sides of the metathorax it is sooty-black; the wings dark fusco-hyaline, having a purple reflection, the externo- and interno-medial and first discoidal cell subhyaline, the apical half of the inferior wings clouded; the anterior and intermediate femora, tibiæ and tarsi ferruginous, posterior tarsi ferruginous, the posterior tibiæ and tarsi clothed with ferruginous pubescence. Abdomen very delicately and closely punctured, the margins of the segments slightly ferruginous.

Hab. Canary Islands. (Coll. W. W. Saunders, Esq.)

107. Andrena mactæ.

Andrena mactæ, *St. Farg. Hym.* ii. 251. 22.
Brullé, Hist. Nat. Il. Canar. ii. 86. 26.
Lucas, Explo. Sc. Algér. iii. 173. 68. t. 5. f. 9.

Hab. North Africa; Algeria (Macta); Canary Islands.

108. Andrena Lepeletieri. B.M.

Andrena dorsalis, *St. Farg. Hym.* ii. 235. 2 (nec *Brullé*).
Andrena Lepeletieri, *Lucas, Explor. Sc. Algér.* iii. 168. 56. t. 5. f. 2.

Hab. Algeria.

109. Andrena velutina.

Andrena velutina, *St. Farg. Hym.* ii. 240. 8.
Luc. Explo. Algér. iii. 170. 59. t. 5. f. 3.

Hab. Algeria.

110. Andrena lugubris.

Andrena lugubris, *St. Farg. Hym.* ii. 248. 17.
Luc. Explo. Sc. Algér. iii. 171. 63. t. 5. f. 6.

Hab. Algeria.

111. Andrena limata.

Andrena lucida, *St. Farg. Hym.* ii. 241. 9 (nec *Panz.*).
Lucas, Explo. Sc. Algér. iii. 170. 60. t. 5. f. 3.
Hab. Algeria.

112. Andrena Oraniensis.

Andrena Oraniensis, *St. Farg. Hym.* ii. 245. 13.
Luc. Explo. Sc. Algér. iii. 170. 60.
Andrena lugubris, *Erichs. Reis. in der Reg. Algier. M. Wagner.* iii. 191. 50.
Hab. Algeria.

113. Andrena bipartita.

Andrena bipartita, *St. Farg. Hym.* ii. 246. 15.
Lucas, Explo. Sc. Algér. iii. 171. 61. t. 5. f. 5.
Hab. Algeria.

114. Andrena vetula.

Andrena vetula, *St. Farg. Hym.* ii. 250. 20.
Luc. Explo. Sc. Algér. t. 5. f. 8.
Hab. Algeria.

115. Andrena russula. B.M.

Andrena russula, *St. Farg. Hym.* ii. 251. 21.
Luc. Explo. Sc. Algér. t. 5. f. 10.
Hab. Algeria; Italy.

116. Andrena sardoa.

Andrena sardoa, *St. Farg. Hym.* ii. 256. 28.
Luc. Explo. Sc. Algér. iii. 177. 74. t. 6. f. 9.
Hab. Algeria.

117. Andrena rufi-ventris.

Andrena rufi-ventris, *St. Farg. Hym.* ii. 255. 27.
Luc. Explo. Sc. Algér. iii. 175. 71. t. 6. f. 3.
Hab. Algeria.

118. Andrena fusca.

Andrena fusca, *St. Farg. Hym.* ii. 253. 24.
Luc. Explo. Sc. Algér. iii. 174. 70. t. 6. f. 2.
Hab. Algeria.

119. Andrena numida.

Andrena numida, *St. Farg. Hym.* ii. 252. 23.
Luc. Explo. Sc. Algér. iii. 174. 69. t. 6. f. 1.
Hab. Algeria.

120. Andrena leucophæa.

Andrena leucophæa, *St. Farg. Hym.* ii. 258. 30.
Luc. Explo. Sc. Algér. iii. 177. 75. t. 6. f. 6.
Hab. Algeria.

121. Andrena binominata.

Andrena binaculata, *St. Farg. Hym.* ii. 258. 31 (nec *Kirby*).
Luc. Explo. Sc. Algér. iii. 181. 85. t. 6. f. 8.
Hab. Algeria.

122. Andrena compta.

Andrena compta, *St. Farg. Hym.* ii. 248. 18.
Luc. Explo. Sc. Algér. iii. 172. 64. t. 5. f. 7.
Hab. Algeria.

123. Andrena cirtana.

Andrena cirtana, *Luc. Explo. Sc. Algér.* iii. 178. 76. t. 6. f. 7.
Hab. Algeria.

124. Andrena distincta.

Andrena distincta, *Luc. Explo. Sc. Algér.* iii. 175. 72. t. 6. f. 4.
Hab. Algeria.

125. Andrena melanosoma.

Andrena melanosoma, *Lucas, Explo. Sc. Algér.* iii. 176. 73. t. 6. f. 5.
Hab. Algeria.

126. Andrena quadricincta.

Andrena quadricincta, *Brullé, Expéd. Sc. Morée*, iii. 354. 782. t. 49. f. 10.
Lucas, Explo. Sc. Algér. iii. 182. 88.
Hab. Algeria; Morea.

127. Andrena Savignyi.

Andrena Savignyi, *Spin. Ann. Soc. Ent. Fr.* vii. 512. 57.
Hab. Egypt.

128. Andrena ephippium.

Andrena ephippium, *Spin. Ann. Soc. Ent. Fr.* vii. 511. 56.
Hab. Egypt.

129. Andrena rutila.

Andrena rutila, *Spin. Ann. Soc. Ent. Fr.* vii. 510. 55.
Hab. Egypt.

130. Andrena hilaris, n. s. B.M.

Female. Length 6½ lines.—Black, the face has on each side a little pale fulvous pubescence, the clypeus shining and deeply punctured, its anterior margin narrowly ferruginous, as well as the mandibles in the middle, being black at their base and apex. Thorax clothed with fulvous pubescence, palest and most dense at the sides of the metathorax, the tegulæ and nervures of the wings rufo-testaceous; wings fulvo-hyaline, their apical margins clouded; legs rufo-testaceous, the apical joints of the tarsi palest, clothed with fulvous pubescence. Abdomen ovate, delicately punctured, the apical margins of the segments have laterally a narrow fringe of pale pubescence, the anal fimbria fulvous.
Hab. Georgia.

131. Andrena vicina, n. s. B.M.

Female. Length 5 lines.—Black, the face clothed with ochraceous pubescence, the vertex and cheeks with the same; the thorax entirely covered with pubescence similar to that on the face, but of a rather brighter colour on the disk; wings hyaline, faintly clouded at their margins, tegulæ and nervures rufo-testaceous; the legs entirely covered with dark fuscous or sooty-black pubescence, the floccus being of the same colour, on the anterior tibiæ and tarsi in front it is somewhat ochraceous, the apical joints of the tarsi ferruginous. Abdomen ovate, the base has a few scattered ochraceous hairs, the anal fimbria sooty-black.

Obs. This species closely resembles the *A. nitida*, only differing in the following particulars: it has no black hairs on the face, the floccus and scopa are not pale, and the abdomen has no patches of white pubescence at the sides: these differences hold good in series of specimens.
Hab. United States; Nova Scotia.

132. Andrena placida, n. s. B.M.

Female. Length 5 lines.—Black, the face on each side has a

thin hoary pubescence, the clypeus strongly punctured, the apical joints of the antennæ ferruginous beneath; the thorax thinly clothed with pale ochraceous pubescence; the wings subhyaline, nervures pale ferruginous, tegulæ rufo-testaceous, the floccus, and scopa beneath, white, the latter fuscous above; the tarsi fulvous beneath, their apical joints ferruginous. Abdomen oblong-ovate, smooth and shining, highly polished at the base, the apical margins of the second, third and fourth segments have laterally a narrow marginal fringe of white pubescence, the anal fimbria fuscous; beneath, the segments have a narrow white marginal fringe.

Hab. United States. (E. Doubleday, Esq.)

133. ANDRENA ALIENA, n. s. B.M.

Female. Length 4 lines.—Black, the face on each side of the clypeus covered with silvery-white pubescence, above the insertion of the antennæ the pubescence is slightly ochraceous and thinly scattered, flagellum beneath ferruginous towards the apex, tips of the mandibles ferruginous. Thorax, the disk shining and thinly covered with dirty ochraceous pubescence, the enclosed space at the base of the metathorax transversely striate, beyond which it is smooth and shining; wings hyaline and iridescent, the nervures dark fuscous; the coxæ and femora beneath fringed with white pubescence, above it is of a dirty white; the scopa has silvery lustre in certain lights, and on the tarsi beneath fulvous, the claws pale ferruginous. Abdomen ovate, somewhat acuminate at the apex, smooth and shining, the apical margins of the second, third and fourth segments having a fascia of dirty white pubescence, the anal fimbria of the same colour.

Obs. This species closely resembles *A. argentata*, but is easily distinguished by the sculpture of the metathorax.

Hab. St. John's Bluff. (E. Doubleday, Esq.)

134. ANDRENA VICTIMA, n. s. B.M.

Female. Length 5 lines.—Black, the face thinly clothed with pale fulvous pubescence, the pubescence of the thorax and legs is similar to that on the face, being deeper-coloured on the disk of the former; the thorax is covered with minute shallow punctures, the metathorax rounded and finely roughened; wings subhyaline, the tegulæ and nervures rufo-testaceous; the apical joint of the tarsi ferruginous, clothed beneath with fulvous pubescence, floccus and scopa pale fulvous. Abdomen ovate, and having a thinly scattered short fulvous pubescence, most dense

towards the apex; the margins of the segments narrowly testaceous.

Obs. All the specimens of this species which have been examined are much infested by a species of *Stylops*, three or four infesting each individual; it closely resembles the *A. convexiuscula*, which is usually attacked in a similar manner.

Hab. Nova Scotia.

135. ANDRENA DESPONSA, n. s. B.M.

Male. Length 4½ lines.—Black, the face and disk of the thorax clothed with pale fulvous pubescence, as well as the legs and thorax beneath, the latter being rather lighter coloured; legs rufo-testaceous, the tarsi being paler, and having a bright fulvous pubescence beneath; wings hyaline, iridescent, the nervures pale testaceous. Abdomen sublanceolate, the base has a little thin pale fulvous pubescence, the apex fulvous, margins of the segments narrowly rufo-piceous.

Obs. This male probably belongs to *A. victima*, to which it bears a strong resemblance, and like that insect is frequently attacked by *Stylops*.

Hab. Nova Scotia. (Lieut. Redman.)

136. ANDRENA INTEGRA, n. s. B.M.

Female. Length 4 lines.—Black, the face thinly clothed with pale fulvous pubescence, the mandibles ferruginous and ciliated with ferruginous hairs. Thorax, the disk thinly covered with fulvous pubescence, on the sides and beneath it is of a much paler tint, the metathorax very finely granulated and having at the base an enclosed space; the wings subhyaline, tegulæ testaceous, nervures pale ferruginous; legs dark rufo-testaceous, the tarsi palest, their pubescence pale fulvous; the floccus and scopa beneath of a glittering whiteness, above of a golden lustre. Abdomen oblong-ovate, shining, and having on each side of the second and third segments on their apical margins a short fringe of white pubescence, margins obscurely rufo-piceous; anal fimbria fulvous.

Hab. United States. (E. Doubleday, Esq.)

137. ANDRENA SIMPLEX, n. s. B.M.

Female. Length 4 lines.— Black, the head above the insertion of the antennæ covered with irregular striæ inclining inwards towards the anterior stemma, the clypeus having a few large scattered punctures, and transversely sculptured with a fine

striation, sides of the face covered with hoary pubescence. Thorax very minutely punctured, and having a few scattered distinct punctures, the pubescence hoary; the wings hyaline, faintly clouded at their apical margins; legs dark rufo-testaceous, the tarsi pale; the floccus and scopa silvery white. Abdomen very closely and delicately punctured, the apical margins of the segments have a narrow white marginal fringe, the first and second more or less interrupted, the apical fimbria fusco-ferruginous.

Hab. United States. (E. Doubleday, Esq.)

This species resembles the *A. fuscata*, but is at once distinguished by the sculpture of the thorax.

138. ANDRENA CLYPEATA, n. s. B.M.

Male. Length 2½ lines.— Black, the clypeus yellow and having two minute black spots; the head and thorax have a thin clothing of ochraceous pubescence; the wings subhyaline, splendidly iridescent, the nervures pale testaceous; the legs have thin ochraceous or pale fulvous pubescence, the apical joints of the tarsi rufo-testaceous. Abdomen oblong-ovate, the apex has a little pale fulvous pubescence.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

139. ANDRENA FRAGILIS, n. s. B.M.

Male. Length 3½ lines.—Black, the face broad and thinly covered with ochraceous pubescence, the cheeks much swollen and produced beneath; the disk of the thorax and the scutellum smooth and shining; wings subhyaline and iridescent, the nervures pale testaceous; the legs have a pale ochraceous pubescence, the tarsi pale rufo-testaceous. Abdomen lanceolate, highly polished, the apex fulvous.

Hab. United States. (E. Doubleday, Esq.)

140. ANDRENA FRIGIDA, n. s. B.M.

Female. Length 4 lines.—Black, the head and thorax covered with long griseous-yellow pubescence, yellowest on the disk of the thorax; the depressions on each side of the face along the margins of the eyes covered with short dark brown pubescence, the mandibles ferruginous at their extreme apex and ciliated with long ferruginous hairs; the disk of the thorax opake; wings subhyaline, faintly clouded at their apical margins, tegulæ and nervures testaceous; legs dark rufo-testaceous, the apical joints of the tarsi ferruginous; the floccus and scopa beneath silvery-white, the latter pale fulvous above, the tarsi beneath fulvous. Abdomen nigro-æneous, the margins of the segments testaceous,

ciliated with long griseous pubescence, the third, fourth and fifth segments have a few scattered erect black hairs, the anal fimbria slightly fulvous; beneath, the margins of the segments are ciliated with fuscous pubescence.

Hab. Nova Scotia.

141. ANDRENA FIMBRIATA, n. s. B.M.

Female. Length 5 lines.—Black, the face thinly covered with ochraceous pubescence, the depressions along the margins of the eyes covered with a pale yellow pile, the flagellum beneath ferruginous. Thorax thickly covered with ochraceous pubescence; the tegulæ rufo-testaceous, the nervures of the same colour, wings subhyaline; legs dark rufo-testaceous, the pubescence on the coxæ and femora pale, that on the tibiæ and tarsi above dark fuscous, the scopa dirty white. Abdomen ovate, the base and margins of all the segments have a long fringe of pale yellow pubescence, the apical fimbria fuscous.

Male.—This sex closely resembles the female, the face having a long yellow beard.

Hab. United States. (E. Doubleday, Esq.)

142. ANDRENA HIRTICEPS, n. s. B.M.

Male. Length 4 lines.—Black, head and thorax densely pubescent, on the vertex and along the margins of the eyes it is black, from the insertion of the antennæ to the anterior margin of the clypeus it gradually becomes snow-white; the mandibles fringed with long white hair. Thorax, above clothed with griseous pubescence; the legs, beneath, have a thin scattered white pubescence, above it is of the same colour, but short and silvery, the apical joints of the tarsi ferruginous and having beneath a pale fulvous pubescence; wings hyaline and iridescent, nervures ferruginous. Abdomen shining and having a thin scattered griseous pubescence, the extreme apex has a few silvery hairs; beneath, the margins of the segments have a white marginal fringe.

Hab. Hudson's Bay. (Coll. H. Barnston.)

143. ANDRENA ALGIDA, n. s. B.M.

Female. Length 4 lines.—Black, the head covered with hoary pubescence, slightly ochraceous on the vertex, the basal joint of the antennæ fringed with the same; the disk of the thorax has a similar pubescence to the vertex, on the sides and beneath it is hoary; the legs beneath have a thin fringe of white pubescence, the scopa beneath silvery, above tinged with yellow; the tarsi

beneath pale fulvous, apical joints of the tarsi ferruginous; wings subhyaline, iridescent, and faintly clouded at their apex, nervures ferruginous. Abdomen ovate, shining, the apical margins of the second, third and fourth segments are fringed with white pubescence, the anal fimbria slightly fulvous.

Male.—This sex is clothed similarly to the female, but the pubescence is longer, the clypeus having a long white beard, and a few black hairs at the margin of the eyes, the pubescence on the legs is entirely hoary; the abdomen elongate-ovate, without marginal fasciæ; the pubescence at the extreme apex pale fulvous.

Hab. Hudson's Bay. (G. Barnston, Esq.)

144. Andrena nubecula, n. s. B.M.

Female. Length 3½ lines.—Black, the face above the insertion of the antennæ finely longitudinally striate, the vertex smooth, below the antennæ thinly covered with hoary pubescence, flagellum beneath rufo-testaceous, mandibles ferruginous at their apex. Thorax, the disk smooth and shining, the sides of the metathorax have a long curled floccus of pale ochraceous hair; wings fusco-hyaline, the anterior wings having a dark cloud occupying the apical margin and also the marginal cell, the posterior wings have their marginal cell clouded; tegulæ testaceous, the nervures dark brown; legs rufo-testaceous, their pubescence pale, the floccus white, apical joints of the tarsi pale ferruginous. Abdomen oblong-ovate, shining and very closely and delicately punctured, apical margins of the second, third and fourth segments having a fascia of white pubescence, the anal fimbria pale fulvous.

Hab. United States (E. Doubleday, Esq.); Nova Scotia (Lieut. Redman).

145. Andrena fulvipennis, n. s.

Female. Length 4 lines.—Black, the face on each side, the vertex and cheeks thickly covered with pale fulvous pubescence, the mandibles ferruginous. Thorax and legs clothed with fulvous pubescence; wings fulvo-hyaline, tegulæ and nervures rufo-testaceous; the tibiæ and tarsi fulvous. Abdomen elongate-ovate; black, with a silken gloss, the margins of the segments have a fascia of pale fulvous pubescence, the anal fimbria ferruginous, beneath rufo-testaceous.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

146. Andrena valida.

Andrena valida, *Say, Bost. Journ. Nat. Hist.* i. 393.

Hab. United States.

147. ANDRENA OBSCURIPENNIS, n. s. B.M.

Female. Length 7½ lines.—Black, the face clothed with fulvous pubescence, the clypeus ferruginous towards the anterior margin, closely punctured and having smooth central longitudinal lines. Thorax clothed with fulvous pubescence, it is short and deepest coloured on the disk, on each side of the metathorax forming a dense floccus of a paler colour; wings reddish-brown, having a violet reflection, tegulæ fulvous, nervures dark brown; legs pale ferruginous, clothed with fulvous pubescence. Abdomen ovate, shining and finely punctured, having merely a few short scattered fulvous hairs at the sides and towards the apex, the anal fimbria fulvous; beneath, the margins of the segments narrowly testaceous and ciliated with fulvous hairs.

Hab. Georgia.

148. ANDRENA PERPLEXA, n. s. B.M.

Female. Length 6 lines.—Black, the pubescence on the face pale fulvous, the clypeus strongly punctured; the thorax clothed with fulvous pubescence, which is palest on the sides of the metathorax and beneath; wings subhyaline, their apical margins clouded, the nervures rufo-testaceous; the legs rufo-testaceous, their pubescence fulvous, the floccus pale fulvous, the tarsi ferruginous. Abdomen ovate, shining, finely and closely punctured; the apical margins of the segments rufo-testaceous, smooth, shining and impunctate; sides of the abdomen and towards the apex covered with fine griseous pile, anal fimbria fusco-ferruginous.

Obs. In general appearance much resembling *A. nitida*, but differs in having the head entirely clothed with pale hair, the legs are of a different colour as well as their pubescence, the abdomen is also of a more elongate form.

Hab. Georgia.

149. ANDRENA NIVALIS, n. s. B.M.

Female. Length 6 lines.—Black, the pubescence on the face pale fulvous, the clypeus deeply punctured; the thorax clothed with fulvous pubescence, palest on the sides and beneath; wings rufo-hyaline, nervures and tegulæ ferruginous; the legs have a reddish-brown pubescence, the scopa beneath fulvous; apical joints of the tarsi ferruginous. Abdomen ovate, shining, the apical fimbria sooty-black intermixed with ferruginous hairs; beneath rufo-testaceous.

Hab. Hudson's Bay; United States.

Genus 24. STENOTRITUS, n. g.

F. Smith's MSS.

Head transverse, eyes lateral, elongate; ocelli placed forwards on the vertex in a curve; the antennæ inserted in the middle of the face, the basal joint short and stout; the superior wings having one marginal and three submarginal cells, the first recurrent nervure received in the middle of the second submarginal cell, the second recurrent nervure received in the middle of the third submarginal; the inner spine at the apex of the posterior tibiæ, as well as the single one at the apex of the anterior and intermediate pairs, toothed like a comb, and very long, bent and acute at the apex; the posterior legs furnished with a floccus and scopa; the abdomen having an anal fimbria.

Obs. The above characters it is hoped will serve to distinguish this fine genus; unfortunately the tongue had been extracted on some previous occasion.

1. Stenotritus elegans.

Female. Length 6½ lines.—Head and thorax black, the former closely punctured; the face and cheeks thickly covered with ochraceous pubescence, the vertex with black. Thorax clothed with a pale ochraceous pubescence, intermixed with fuscous on the disk; metathorax rounded behind; wings fusco-hyaline, clearer towards their base; legs, above clothed with dark fuscous pubescence, beneath it is of a silvery-white, very bright on the scopa and floccus. Abdomen dark olive-green, the base fringed with a nearly white pubescence; on the three following segments it is black, short and thinly scattered; the anal fimbria bright fulvous; beneath, the margins of the segments are fringed with long fulvous pubescence.
Hab. Sydney, New South Wales.

Genus 25. MELLITIDIA.

Mellitidia, *Guérin, Voy. Coq. Zool.* ii. 269.

1. Mellitidia Australis.

Andrena Australis, *Guérin, Voy. Coq. Zool.* p. 269.
Hab. Australia.

Genus 26. SCRAPTER.

(Details, Plate IV.)

Scrapter, *St. Farg. Ency. Méth.* x. 403.
Andrena, pt., *Lucas, Explo. Sc. Algér.* iii. 179.

Body similar in form to the species of *Andrena*, but differing in having the ocelli more nearly in a straight line or slight curve; the labium elongate-lanceolate, the paraglossæ about half its length; labial palpi four-jointed, being nearly as long as the labium, the basal joint as long as the three following; the terminal lobe of the maxillæ nearly half their entire length, the lobe acute at the apex. The superior wings having one marginal and two submarginal cells, the second submarginal cell receiving both the recurrent nervures a little within.

1. SCRAPTER BICOLOR.

Scrapter bicolor, *St. Farg. & Serv. Enc. Méth.* x. 404. 1.
Hab. Africa.

2. SCRAPTER PUNCTATUS.

Scrapter punctatus, *St. Farg. & Serv. Enc. Méth.* x. 404. 2.
Hab. Africa.

3. SCRAPTER NIGER.

Scrapter niger, *St. Farg. & Serv. Enc. Méth.* x. 404. 3.
Hab. Africa.

4. SCRAPTER LAGOPUS.

Andrena lagopus, *Latr. Gen. Crust. Ins.* iv. 151?
St. Farg. Hym. ii. 261. 2.
Hab. South of France.

5. SCRAPTER BRULLEI.

Scrapter Brullei, *St. Farg. Hym.* ii. 260. 1.
Brullé, Hist. Nat. Il. Canar. p. 86. 24.
Hab. The Canary Islands.

6. SCRAPTER ANNULIPES.

Andrena? annulipes, *Luc. Explo. Sc. Algér.* iii. 179. t. 6. f. 11.
Hab. Algeria.

7. Scrapter albo-pilosus.

Andrena? albo-pilosa, *Luc. Explo. Sc. Algér.* iii. 179. 78. t. 6. f. 10.

Hab. Algeria.

8. Scrapter striatus, n. s.

Male. Length 3 lines.—Black, head as wide as the thorax, the vertex longitudinally striate, the face covered with ochraceous pubescence, disk of the thorax strongly punctured and thinly covered with ochraceous pubescence; the thorax beneath the legs, the sides and the abdomen towards the apex covered with cinereous pubescence, at the apex of the abdomen mixed with fulvous hairs; abdomen very shining at the base, the anterior tibiæ in front, the anterior and intermediate tarsi and apical joints of the posterior tarsi testaceous.

Hab. Cape. (Coll. F. Smith.)

9. Scrapter Andrenoides. B.M.

Female. Length 3 lines.—Black, the head closely punctured, most strongly so on the clypeus and lower part of the face; antennæ short, scarcely reaching the tegulæ, testaceous beneath; on each side of the face near the margin of the eyes a smooth impressed line. Thorax shining, finely punctured; the metathorax at its base immediately beneath the post-scutellum has a few short striæ, beyond which it is smooth and rounded; wings subhyaline, tegulæ pale testaceous, nervures and stigma fuscous; legs rufo-testaceous, the posterior tibiæ clothed with long silvery hairs. Abdomen elongate-ovate, acute at the apex, the extremity of which is rufo-testaceous; margins of the segments subdepressed and faintly rufo-testaceous, which is the colour of the abdomen beneath.

Obs. This species in general appearance much resembles *Andrena parvula*.

Hab. Mount Pleasant, Ohio.

Genus 27. CAMPTOPŒUM.

Prosopis, pt., *Fabr. Syst. Piez.* p. 293.
Panurgus, *Spin. Ann. Soc. Ent. Fr.* vii. 516.
Camptopœum, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 139.

1. Camptopœum frontalis.

Prosopis frontalis, *Fabr. Syst. Piez.* p. 296. 14.
Panurgus nasutus, *Spin. Ann. Soc. Ent. Fr.* vii. 516.
Camptopœum frontalis, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 139.
Hab. Germany.

2. Camptopœum interruptum.

Camptopœum interruptum, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 139. 28.
Hab. Spain.

Genus 28. CILISSA.

(Details, Plate IV.)

Andrena, pt., *Fabr. Ent. Syst.* ii. 307 (1793).
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 140, * * *e* (1802).
Cilissa, *Leach, Edin. Enc.* 9 (1812).
Kirbya, *St. Farg. Hym.* ii. 145 (1841).
Melitta, *St. Farg. Hym.* ii. 213.

1. Cilissa hæmorrhoidalis. B.M.

Andrena hæmorrhoidalis, *Fabr. Ent. Syst.* ii. 313. 25; *Syst. Piez.* p. 327. 24.
Panz. Faun. Germ. 65. 20.
Zett. Ins. Lapp. p. 459. 1.
Melitta chrysura, *Kirby, Mon. Ap. Angl.* ii. 172. 110.
St. Farg. Hym. ii. 214. 2.
Cilissa hæmorrhoidalis, *Leach, Edin. Enc.* ix. 155.
Smith, Zool. vi. 2207. 1.
Nyland. Revis. Ap. Boreal. p. 268. 3.
Kirbya chrysura, *St. Farg. Hym.* ii. 146. 2 !!
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 246. 1.
Hab. Britain; France; Germany; Switzerland; Denmark; Sweden; Finland; Lapland.

2. Cilissa tricincta. B.M.

Melitta tricincta, *Kirby, Mon. Ap. Angl.* ii. 171. 109.
St. Farg. Hym. ii. 213. 1.
Apis leporina, *Panz. Faun. Germ.* 63. 22.
Anthophora leporina, *Fabr. Syst. Piez.* p. 374. 7.
Cilissa tricincta, *Leach, Edin. Enc.* ix. 155.
Smith, Zool. vi. 2208. 2.
Nyland. Revis. Ap. Boreal. p. 267. 1.

Kirbya tricincta, *St. Farg. Hym.* ii. 145. 1 !!
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. ii. *Supp.* ♀, 102.
Hab. Britain; France; Germany; Sweden; Denmark; Finland.

3. Cilissa melanura.

Cilissa melanura, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 101; *Revis. Ap. Boreal.* p. 268. 2.
Hab. Finland; Gothland.

4. Cilissa Americana, n. s. B.M.

Female. Length 5 lines.—Black, the face thinly covered with griseous pubescence; the clypeus is minutely punctured, interspersed with larger punctures, and has a central longitudinal smooth line, the flagellum of the antennæ rufo-testaceous beneath. Thorax, the disk closely covered with shallow punctures, and clothed with ochraceous pubescence, at the sides and beneath it is pale; wings subhyaline, the tegulæ and nervures rufo-testaceous, the legs beneath fringed with pale hairs, on the scopa above it is pale fuscous, apical joints of the tarsi ferruginous. Abdomen closely punctured, margins of the segments testaceous and having a fascia of pale pubescence; the anal fimbria fuscous.
Hab. United States. (E. Doubleday, Esq.)

Genus 29. MEGACILISSA, n. g.

Megacilissa, *F. Smith's MSS.* (Details, Plate IV.)

Head transverse, ocelli placed in a triangle on the vertex, eyes lateral, oblong; mandibles stout, slightly curved, deeply grooved exteriorly, and having three teeth at the apex; the labrum produced, somewhat ovate in front, and much swollen above at its base; the labial palpi four-jointed, the joints short and thick, the basal joint as long as the two following, the latter as well as the apical joint of equal length; at the apex of the mentum the paraglossæ are produced parallel with it, densely pubescent; labium folded. Maxillary palpi six-jointed, the basal joint as long as the two following, the three apical ones of equal length, nearly as long as the basal one; anterior wings having one marginal and three submarginal cells, the marginal cell narrow, elongate, and truncate at the apex; the first submarginal cell as long as the two following, the first recurrent nervure uniting with the first transverse cubital nervure. The outer spine at the base of the posterior tibiæ serrate. Abdomen broad at

the base, narrowing towards the apex, which is furnished with an anal fimbria.

Obs. The situation of this fine insect is not probably that at present assigned to it; but the only specimen known is in the National Collection, and those parts of the oral organs which might determine it could not be sufficiently examined. The name of the genus sufficiently indicates its general appearance, and seems to point out its situation.

1. MEGACILISSA SUPERBA, n. s. B.M.

Female. Length 9½ lines.—Black, the face densely clothed with white pubescence, on the vertex it is black, and the posterior margin of the vertex is fringed with white; the apex of the labrum ferruginous, and covered with stiff ferruginous hairs. Thorax above clothed with bright fulvous pubescence; on the sides, beneath, and on the anterior femora beneath it is white, there is also a little white on the intermediate tibiæ, the scopa very dense and of a dull brown, otherwise the legs are thickly covered with short black pubescence; the basal segment of the abdomen clothed with fulvous pubescence, that on the three following segments is short and black, having a white fascia on their apical margins, the fifth and sixth covered with long black pubescence, the latter naked in the middle; beneath black.

Hab. Not known.

Genus 30. DASYPODA.

Andrena, pt., *Fabr. Ent. Syst.* ii. 307 (1793).
Apis, pt., *Fabr. Ent. Syst.* ii. 335.
Melitta, pt., *Kirby, Mon. Ap. Angl.* i. 140, * * *e* (1802).
Dasypoda, *Latr. Hist. Nat.* xiii. 369 (1805).

1. DASYPODA HIRTIPES. B.M.

Andrena hirtipes, *Fabr. Ent. Syst.* ii. 312. 24.
Apis hirta, *Fabr. Ent. Syst.* ii. 335. 92.
Andrena plumipes, *Panz. Faun. Germ.* 46. 16, ♀.
Apis farfarisequa, *Panz. Faun. Germ.* 55. 14, ♂.
Dasypoda hirta, *Fabr. Syst. Piez.* p. 336. 2.
Melitta Swammerdamella, *Kirby, Mon. Ap. Angl.* ii. 174. 111.
Dasypoda hirtipes, *Latr. Hist. Nat.* xiii. 369. 1.
Fabr. Syst. Piez. p. 335. 1.
St. Farg. Hym. ii. 229. 1. t. 22. f. 1 ♀, 2 ♂.
Smith, Zoologist, vi. 2241. 1.
Nyland. Apum Boreal. Act. Soc. Sc. Fenn. i. 225. 1.

Trachusa hirtipes, *Jurine, Hym.* p. 250.
Dasypoda plumipes, *Leach, Edin. Encycl.* ix. 155.
Dasypoda Swammerdamella, *Curtis, Brit. Ent.* viii. t. 367.
Hab. Britain; France; Germany; Sweden.

2. Dasypoda plumipes. B.M.

Dasypoda plumipes, *Latr. Gen. Crust. Ins.* iv. 152.
Panz. Faun. Germ. 99. 15.
St. Farg. Hym. ii. 230. 2.
Nyland. Revis. Ap. Boreal. p. 259. 1.
Hab. France; Germany; Tunis.

3. Dasypoda Græca. B.M.

Dasypoda Græca, *St. Farg. Encyl. Méth.* ii. 405. 1, ♂ *Hym.* ii. 231. 3.
Hab. Albania; South of France; Malaga.

4. Dasypoda subinterrupta. B.M.

Dasypoda subinterrupta, *Brullé, Exped. Sc. Morée. Zool.* iii. 352. 779. t. 49. f. 7, ♀.
Hab. The Morea; Albania.

5. Dasypoda bætica.

Dasypoda bætica, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 139. 27.
Hab. Spain.

6. Dasypoda albipila.

Dasypoda albipila, *Spin. Ann. Soc. Ent. Fr.* vii. 510. 54.
Hab. Egypt.

7. Dasypoda Panzeri.

Dasypoda Panzeri, *Spin. Ann. Soc. Ent. Fr.* vii. 508. 53.
Andrena succincta, *Panz. Faun. Germ.* 46. 10.
Hab. Egypt.

Genus 31. MACROPIS.

(Details, Plate VI.)

Macropis, *Panz. Faun. Germ.* 107. 16 (1809) (*Klug, MSS.*).
Megilla, pt., *Fabr. Syst. Piez.* p. 332.

1. MACROPIS LABIATA. B.M.

Macropis labiata, *Panz. Faun. Germ.* 107. 16.
Smith, Zool. iv. 1279. 1.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 248. 1; *Supp. Ap. Boreal.* p. 269. 1.
Megilla labiata, *Fabr. Syst. Piez.* ♂, p. 333. 21.
Leon Dufour, Ann. Soc. Ent. Fr. vii. 288. t. 9. f. 3, ♂.
Megilla fulvipes, *Fabr. Syst. Piez.* p. 332. 20 (& *Mus. Kiel.*) ♀.
Hab. Britain; France; Germany; Denmark; Sweden; Finland.

Fam. 2. APIDÆ.

Apiariæ, *Latr. Hist. Nat. Ins.* (1802).
Apida, *Leach, Edin. Encycl.* (1812).
Apides, *Leach, Edin. Encycl.* (1812).
Apidæ, *Leach, Brit. Encycl.* (1817).
Apites, *Newm. Ent. Mag.* ii. (1834).

Subfam. 1. ANDRENOIDES.

Andrenoides, *Latr. Fam. Nat.* (1825).
Panurgites, *Newm. Ent. Mag.* ii. (1834).
Panurgides, *Westw. Int. Class. Ins.* (1840).

Genus 1. PANURGUS.

(Details, Plate V.)

Apis, pt., *Scop. Ent. Carn.* p. 298 (1763).
Philanthus, pt., *Fabr. Ent. Syst.* ii. 288 (1793).
Andrena, pt., *Panz. Faun. Germ.* 69 (1800).
Trachusa, pt., *Panz. Faun. Germ.* 96 (1800).
Dasypoda, pt., *Fabr. Syst. Piez.* p. 335 (1804).
Panurgus, *Panz. Krit. Revis.* p. 211 (1805).
Eriops, *Klug, Illig. Mag.* vi. (1806).

1. PANURGUS CALCARATUS. B.M.

Apis calcarata, *Scop. Ent. Carn.* p. 301. 803, ♂.
Philanthus ater. *Fabr. Ent. Syst.* ii. 292. 13, ♂.
Apis ursina, *Kirby, Mon. Ap. Angl.* ii. 178. 1, var. β, ♀.
Apis Linnæella, *Kirby, Mon. Ap. Angl.* ii. 179. 2, ♂.
Andrena lobata, *Panz. Faun. Germ.* 72. 16, ♂.
Dasypoda lobata, *Fabr. Syst. Piez.* p. 336. 3, ♂.
Trachusa lobata, *Panz. Faun. Germ.* 96. 18, ♀.

Panurgus ater, *Panz. Krit. Revis.* p. 211, ♂.
Panurgus unicolor, *Spin. Ins. Lig.* fasc. 2. p. 54. 42?
Panurgus lobatus, *Latr. Enc. Méth.* viii. 719. 3, ♂ ♀.
St. Farg. Hym. ii. 225. 2, ♂ ♀.
Nyland. Act. Soc. Sc. Fenn. i. 225. 2, ♂ ♀.
Panurgus calcaratus, *Smith, Zool.* iv. 1452. 2, ♂ ♀.
Hab. Britain; France; Italy; Germany; Switzerland; Denmark; Sweden; Finland; Algeria.

2. PANURGUS BANKSIANUS. B.M.

Apis Banksiana, *Kirby, Mon. Ap. Angl.* ii. 179. 3, & *Cab. Mus. Ent. Soc.* ♂.
Don. Brit. Ins. xii. 26. t. 403. f. 2.
Apis ursina, *Kirby, Mon. Ap. Angl.* ii. 178. 1, not var. β, & *Cab. Mus. Ent. Soc.* ♀.
Dasypoda ursina, *Latr. Hist. Nat.* xiii. 370. 2, ♀.
Trachusa atra, *Panz. Faun. Germ.* 96. 19, ♂.
Panurgus ater, *Latr. Enc. Méth.* viii. 720. 5, ♂ ♀.
Spin. Ins. Lig. fasc. 3. p. 196. 1.
St. Farg. Hym. ii. 226. 4.
Nyland. Act. Soc. Sc. Fenn. i. 224. 1.
Panurgus ursinus, *Curtis, Brit. Ent.* iii. t. 101.
Smith, Zool. iv. 1051. 1.
Hab. Britain; France; Germany; Italy.

3. PANURGUS CEPHALOTES. B.M.

Panurgus cephalotes, *Latr. Encycl. Méth.* viii. 719. 1.
St. Farg. Hym. ii. 223. 1.
Lucas, Explo. Sc. Algér. iii. 168. 55. t. 5. f. 1.
Hab. Algeria.

4. PANURGUS DENTIPES.

Panurgus dentipes, *St. Farg. Hym.* ii. p. 224. 2. t. 19. f. 3 ♀. 4 ♂.
Hab. France.

Genus 2. PANURGINUS.

Panurginus, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 223. 1. t. 3. f. 3.

1. PANURGINUS NIGER.

Panurginus niger, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 223. 1.
Hab. Siberia.

Genus 3. PERDITA, n. g.

Perdita, *F. Smith's MSS.* (Details, Plate V.)

Antennæ inserted in the middle of the face, approximating at their base; eyes lateral, elongate-ovate, ocelli placed in a triangle on the vertex; mandibles slightly bent and without teeth; the labrum produced angularly in front; tongue elongate, twice the length of the mentum (labial and maxillary palpi wanting); superior wings having one short marginal cell rounded on its inferior margin, and broadly truncate at the apex, the first submarginal cell more than twice the length of the second.

1. PERDITA HALICTOIDES.

Female. Length 2 lines.—Head and thorax above nigro-æneous, shining; the antennæ at their extreme base and the flagellum beneath pale testaceous; the clypeus much produced and having a few scattered punctures; mandibles pale rufo-testaceous, ferruginous at their tips; the metathorax of a blue-green, disk of the thorax somewhat brassy, the former smooth, truncated behind; tegulæ and extreme base of the wings pale testaceous; wings hyaline, their nervures fuscous; legs rufo-testaceous, the tarsi pale. Abdomen dark testaceous, the apex covered with cinereous pubescence.

Hab. N. America. (Coll. F. Smith.)

Genus 4. CALLIOPSIS.

Calliopsis, *F. Smith's MSS.* (Details, Plate V.)

Head as wide as the thorax, ocelli placed in a triangle on the vertex; the labium about equal in length to the mentum, long and slender towards the apex, which is pubescent; the first joint of the labial palpi, which are four-jointed, longer than the three following; the maxillary palpi six-jointed; the labrum rounded in front; the anterior wings having one marginal cell, rounded at its apex, two submarginal cells, the first rather longer than the second, which is narrowed towards the marginal cell.

1. CALLIOPSIS ANDRENIFORMIS. B.M.

Female. Length 3¼ lines.—Black, a line down the centre of the clypeus united to a half-circular spot between the antennæ, and an oblong macula on each side of the face touching the eyes, yellow; the flagellum beneath beyond the fourth joint

yellow, the mandibles ferruginous, rounded, their apex edentate. Thorax, the sides have a short pale pubescence, most dense on the collar and post-scutellum; wings subhyaline, iridescent, their apical margins slightly clouded; the tibiæ and tarsi above rather densely covered with a short pale fulvous or yellow pubescence, the tarsi fulvous beneath, claws ferruginous. Abdomen ovate, delicately punctured; all the segments have a narrow white marginal fringe, the two first usually interrupted.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

2. CALLIOPSIS FLAVIPES.

Male. Length 3 lines.—Black, the face, labrum, mandibles, scape, flagellum beneath, tubercles and legs bright yellow; the wings hyaline, iridescent, and faintly clouded at their apical margins; the disk of the thorax and the vertex have a slight æneous tinge; the pubescence on the sides of the thorax pale ochraceous, most dense on the post-scutellum. Abdomen ovate, the margins of the segments testaceous, and having a fringe of short pale pubescence usually more or less interrupted on the two basal segments; the apex has on each side a short floccus of bright pale pubescence.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

3. CALLIOPSIS MACULATUS.

Female. Length 4 lines.—Black, the sides of the clypeus, a coronet-shaped spot above, on each side of it a minute lunate spot, and another at the base of the mandibles, yellow; the flagellum fulvo-testaceous beneath. Thorax, the disk has a fulvous pubescence, on the metathorax and beneath it is griseous; the wings hyaline, iridescent, their apical margins having a slight fuscous cloud, the tegulæ testaceous; the tibiæ and tarsi above have a glittering pale yellow pubescence, on the tarsi beneath it is bright fulvous, the claw-joints ferruginous; the calcariæ ferruginous, the extreme base of the anterior and intermediate tibiæ yellow. Abdomen ovate, the margins of the segments narrowly testaceous, and having a marginal fascia of pale ochraceous pubescence, on the two basal segments usually nearly obliterated.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

4. CALLIOPSIS FLAVIFRONS.

Male. Length 4 lines.—Black, the face, scape of the antennæ in front, labrum and mandibles yellow, the latter have a black line on their inferior margin and are ferruginous at the

tips; the flagellum pale testaceous beneath. Thorax, the disk thinly covered with pale ochraceous pubescence; the anterior and intermediate tibiæ in front yellow; all the tibiæ and tarsi have a pale glittering pubescence; the apical joints of the tarsi ferruginous; wings subhyaline, iridescent, nervures fuscous, the tegulæ testaceous. Abdomen short and somewhat globose, delicately punctured, the margins of the segments have on each side a short fascia of white pubescence.

Obs. The fascia on the abdomen probably in very recently disclosed specimens would be entire.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

Genus 5. MACROTERA.

Macrotera, *F. Smith's MSS.* (Details, Plate V.)

Head as wide as the thorax, ocelli in a slight curve on the vertex; the mentum about one-third the length of the labium; the labium elongate, slender, tapering to a point at its apex; the labial palpi four-jointed, the basal joint one-third longer than the three following united; the basal joint narrowest at its apex; maxillary palpi six-jointed, gradually tapering to the apex; the anterior wings having one marginal cell, truncate at its apex; submarginal cells two, the first about twice the length of the second; the second narrowed to about half its length towards the marginal; the posterior tibiæ having a long loose clothing of hair.

1. MACROTERA BICOLOR. B.M.

Female. Length 4 lines.—Head and thorax black, head delicately and closely punctured, the clypeus and lower parts of the face having large scattered punctures, the anterior margin of the clypeus truncate; the flagellum rufo-testaceous beneath; the mandibles ferruginous, rounded at their apex, edentate. Thorax, the disk smooth and shining, having a few scattered fine punctures, the metathorax rounded, impunctate above, and having a thin pale pubescence; the wings hyaline and iridescent, the tegulæ testaceous, nervures ferruginous; the tarsi have a glittering pale yellow pubescence, and the posterior tibiæ have a thin scopa of the same colour, the claw-joints of the tarsi rufo-testaceous. Abdomen elongate-ovate, ferruginous, more or less fuscous at the base, the apex having a thin fimbria of pale pubescence.

Hab. Mexico.

This insect would be taken for a species of the genus *Andrena* without attentive examination, so closely does it resemble the insects belonging to that genus,—but it is easily distinguished from them.

Genus 6. SYSTROPHA.

(Details, Plate V.)

Eucera, pt., *Scop. Ann. Hist. Nat.* iv. 9 (1770).
Apis, pt., *Rossi, Faun. Etrus.* ii. 106. 921 (1790).
Andrena, pt., *Ent. Syst.* ii. 308. 3 (1793).
Hylæus, pt., *Fabr. Syst. Piez.* p. 320. 6 (1804).
Ceratina, pt., *Jurine, Hym.* p. 234 (1807).

1. SYSTROPHA CURVICORNIS. B.M.

Eucera curvicornis, *Scop. Ann. Hist. Nat.* iv. 9.
Apis curvicornis, *Rossi, Faun. Etrus.* ii. 106. 921.
Andrena spiralis, *Fabr. Ent. Syst.* ii. 308. 3.
Coqueb. Illustr. Icon. t. 15. f. 8.
Panz. Faun. Germ. 35. 22.
Oliv. Ency. Méth. iv. 135. 3.
Hylæus spiralis, *Fabr. Syst. Piez.* 320. 6; iv. 135.
Systropha spiralis, *Illig. Mag.* vi.
Latr. Gen. Crust. Ins. p. 157.
St. Farg. Hym. ii. 144. 1.

Hab. France; Italy; Switzerland; Spain.

Genus 7. PTILOTHRIX.

Ptilothrix, *F. Smith's MSS.* (Details, Plate VI.)

Head not quite as wide as the thorax, ocelli placed in a slight curve on the vertex; the labium twice the length of the mentum, broadest about the middle, tapering towards the apex, which is blunt; the paraglossæ half the length of the labium, attenuating to a point at their apex; the labial palpi rather shorter than the labium, four-jointed, the first and second elongate, placed end to end, the two apical joints minute, placed at the side of the second joint at its apex; the maxillary palpi six-jointed, the three basal joints of equal length, the three apical ones of equal length, but shorter than the basal joints; the anterior wing having one marginal and three submarginal cells, the marginal cell slightly rounded at its apex; the second submarginal cell

much narrowed towards the marginal, the third slightly so; the posterior tibiæ and the basal joint of the tarsi furnished with a thin scopa of long pubescence.

1. Ptilothrix plumatus.

Female. Length 5 lines.—Black, the clypeus and labrum have large scattered punctures and are thinly clothed with griseous pubescence, above the insertion of the antennæ and on the cheeks it is dense, short, and dark fuscous; the flagellum ferruginous beneath, tips of the mandibles yellow. Thorax, the disk densely clothed with short fulvous pubescence, thinner and paler on the sides; the legs red, the coxæ black; the anterior coxæ and femora fringed with black pubescence; the intermediate and posterior coxæ and trochanters fringed with cinereous pubescence; on the anterior tibiæ and tarsi above, and on the posterior tarsi within, it is fuscous, otherwise the legs have a glittering pale yellowish pubescence, having a little which is snow-white at the apex of the posterior tibiæ; wings hyaline, and having a yellowish tinge towards their base, tegulæ and nervures pale rufo-testaceous. Abdomen ovate, the base fringed with short fulvous pubescence; the margin of the first and three following segments has a broad fascia of very short decumbent pubescence, broadest in the centre; the two apical segments covered with rigid black pubescence.

Obs. This beautiful species is remarkable for having the entire pubescence plumose, each individual hair being pectinate; that on the metathorax, viewed under a pocket lens of good power, resembles fine down; even the short pubescence which forms the fascia on the abdomen is equally beautiful.

Hab. Brazil. (Coll. F. Smith.).

Genus 8. ROPHITES.

(Details, Plate V.)

Rophites, *Spin. Ins. Lig.* fasc. 2. no. 50. p. 72.
Dufourea, *St. Farg. Hym.* ii. 228.
Halictoides, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 195.

1. Rophites quinquespinosa. B.M.

Rophites quinquespinosa, *Spin. Ins. Lig.* fasc. 2. p. 72. no. 5.
Latr. Gen. Crust. et Ins. iv. p. 161.
Encycl. Méth. x. 312. 1.
Rophites spinosus, *Nyland. Revis. Apum Boreal.* p. 235. 1.
Hab. France; Italy.

2. Rophites minuta.

Dufourea minuta, *St. Farg. Hym.* ii. 228. 1.
Hab. South of France; Spain.

3. Rophites Dejeanii.

Dufourea Dejeanii, *St. Farg. Hym.* ii. 228. 2.
Halictoides dentiventris, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 195. t. 3. f. 2.
Rophites dentiventris, *Nyland. Revis. Ap. Boreal.* p. 236.
Hab. France; Sweden; Finland. (Coll. F. Smith.)

4. Rophites inermis.

Halictoides inermis, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 197. 2.
Hab. Siberia.

5. Rophites halictulus.

Rophites halictulus, *Nyland. Revis. Apum Boreal. Act. Soc. Sc. Fenn.* 236. 2.
Hab. Sweden.

Genus 9. OSMIA.

(Details, Plate V.)

Apis, pt., *Linn. Syst. Nat.* p. 953 (1766).
Andrena, pt., *Fabr. Ent. Syst.* ii. 307 (1793).
Anthophora, pt., *Fabr. Syst. Piez.* p. 372 (1804).
Osmia, *Panz. Faun. Germ.* (1806).
Amblys, *Klug, Illig. Mag.* vi. (1807).
Hoplitis, *Klug, Illig. Mag.* vi. (1807).
Trachusa, pt., *Jurine, Hym.* (1808).
Diphysis, *St. Farg. Hym.* ii. 307 (1841).

1. Osmia rufa. B.M.

Apis rufa, *Linn. Faun. Suec.* 1690, ♂, ♀ *Cab. Mus. Linn. Soc. Syst. Nat.* i. 954. 9.
Fabr. Syst. Ent. ii. 34. 88.
Rossi, Faun. Etrus. ii. 103. 913.
Panz. Faun. Germ. 56. 10.
Apis bicornis, *Linn. Faun. Suec.* 1691, ♀, ♂ *Cab. Mus. Linn. Soc. Syst. Nat.* i. 954. 10.
Fabr. Syst. Ent. p. 384. 38.
Christ. Hym. p. 159. t. 12. f. 9.
Rossi, Mant. p. 310.
Kirby, Mon. Ap. Angl. ii. 271. 57.
Apicis bicornis, *Harris, Expos.* p. 162. t. 49. f. 4, ♀.

Apicis agino, *Harris, Expos.* p. 163. t. 49. f. 7, ♂.
Apis cornigera, *Rossi, Faun. Etrus.* ii. 108. 925, var. ♀.
Panz. Faun. Germ. 55. 15.
Megachile cornigera, *Spin. Ins. Lig.* i. 147. 15, ♀.
Anthophora bicornis, *Fabr. Syst. Piez.* p. 375. 16, ♂ ♀.
Zett. Ins. Lapp. p. 466. 5.
Megachile bicornis, *Latr. Hist. des Ins.* xiv. 50.
Spin. Ins. Lig. fasc. 1. 147. 15.
Osmia bicornis, *Latr. Enc. Méth.* viii. 576. 3, ♂ ♀.
St. Farg. Hym. ii. 314. 2.
Smith, Zool. ii. 745. 5. 8.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 259. 1.
Amblys rufa, *Klug, Illig. Mag.* vi. 198. 220.
Osmia hedera, *Smith, Zool.* ii. 747. 10, var. ♂ ?
Osmia rufa, *Smith, Cat. Brit. Hym.* 78. 1.
Nyland. Revis. Ap. Boreal. p. 269. 1.
Mouche maçonne, *Reaum.* vi. *Mem.* iii. 86.

Hab. Britain; France; Germany; Italy; Lapland; Finland; Denmark; Sweden.

2. Osmia cornuta. B.M.

Megachile cornuta, *Latr. Hist. Nat.* xiv. 59. 14.
Spin. Ins. Lig. i. 146. 13.
Apis bicornis, *Oliv. Enc. Méth.* iv. 169. 47, ♀.
Osmia cornuta, *Latr. Enc. Méth.* viii. 575. 2.
St. Farg. Hym. ii. 313. 1.
Smith, Zool. vi. 2213.
Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn. p. 269. 4.

Hab. Britain; France; Italy; Algeria.

3. Osmia leucomelana. B.M.

Apis leucomelana, *Kirby, Mon. Ap. Angl.* ii. 260. 52, ♀.
Osmia leucomelana, *Smith, Zool.* ii. 741. 1, ♂ ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 263. 5, ♂, & ii. *Supp.* 105, ♀.

Hab. Britain; Denmark; Sweden; Finland.

4. Osmia spinulosa. B.M.

Apis spinulosa, *Kirby, Mon. Ap. Angl.* ii. 261. 53.
Osmia spinulosa, *Smith, Zool.* ii. 741. 2.

Hab. Britain; Denmark; Sweden; Finland.

5. Osmia parietina. B.M.

Osmia parietina, *Curtis, Brit. Ent.* v. t. 222, ♀.
Smith, Zool. ii. 743. 4, ♀.

Osmia inermis, *Zett. Ins. Lapp.* 466. 6, ♀?
Nyland. Revis. Ap. Boreal. p. 270. 7.
Hab. Britain; Sweden; Finland; Lapland.

6. Osmia pilicornis. B.M.

Osmia pilicornis, *Smith, Zool.* iv. 1567, ♂ ♀.
Hab. Britain.

7. Osmia xanthomelana. B.M.

Apis xanthomelana, *Kirby, Mon. Ap. Angl.* ii. 246. 46, ♀.
Osmia atricapilla, *Curtis, Brit. Ent.* v. 222, ♀.
Waterhouse, Zool. ii. 403, ♂ ♀.
Osmia nigriventris, *Zett. Ins. Lapp.* p. 465. 4, ♀.
Osmia xanthomelana, *Smith, Zool.* ii. 745. 7.
Steph. Ill. Brit. Ent. Mand. vii. 16. 2, *Supp.* t. 43. f. 2.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. Supp. p. 270. 5.
Hab. Britain; France; Lapland; Sweden; Finland.

8. Osmia ænea. B.M.

Apis ænea, *Linn. Faun. Suec.* 1695, ♂, & *Syst. Nat.* i. 995. 20.
Scop. Ent. Carn. p. 809, ♂, f. 809.
Apis cærulescens, *Linn. Faun. Suec.* 1696, ♀; *Syst. Nat.* i. 995. 21.
Kirby, Mon. Ap. Angl. ii. 264. 55, ♂ ♀.
Andrena cærulescens, *Fabr. Syst. Ent.* p. 376. 2, ♀.
Rossi, Faun. Etrus. ii. 86. 893, ♀.
Panz. Faun. Germ. 65. 18.
Apicis superbus, *Harris, Expos.* p. 164. 10. t. 49. f. 10, ♀.
Andrena ænea, *Rossi, Faun. Etrus.* ii. 96. 894.
Panz. Faun. Germ. 56. 3.
Anthophora ænea, *Fabr. Syst. Piez.* p. 381. 40, ♀.
Megachile cærulescens, *Spin. Ins. Lig.* fasc. 1. 145. 12.
Osmia cærulescens, *Latr. Enc. Méth.* viii. 581. 12, ♂ ♀.
St. Farg. Hym. ii. 325. 16.
Brullé, Hist. Nat. Il. Canar. iii. 85. 10.
Smith, Zool. ii. 743. 5.
Lucas, Explo. Sc. Algér. p. 190. 109.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 262. 4; *Revis. Ap. Boreal.* p. 271. 8.
Abeille maçonne, &c., *De Geer, Mem.* ii. 751. t. 30. f. 23 ♀, & t. 32. f. 1 ♂.
Hab. Britain; France; Italy; Germany; Portugal; Canary Islands; Algeria; Denmark; Sweden.

9. Osmia aurulenta. B.M.

Apis aurulenta, *Panz. Faun. Germ.* 63. 22, ♀.

Apis hæmatoda, *Panz. Faun. Germ.* 81. 20, ♂.
Apis tunensis, *Kirby, Mon. Ap. Angl.* ii. 269. 56, not the male.
Megachile tunensis, *Latr. Hist. Nat.* xiv. 58. 13, ♀.
Spin. Ins. Lig. fasc. 1. p. 144. 11.
Osmia aurulenta, *Latr. Enc. Méth.* viii. 584. 19, ♀.
Panz. Revis. Hym. p. 232.
St. Farg. Hym. ii. 323. 13. t. 20. f. 4, ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. ii. *Supp.* 103. ♀.
Osmia tunensis, *Brullé, Expéd. Sc. Morée*, p. 388. 751.
Smith, Zool. ii. 744. 6.
Lucas, Explo. Sc. Algér. p. 189. 106. t. 7. f. 6.

Hab. Sweden.

10. Osmia bicolor. B.M.

Apis bicolor, *Schrank, Ins. Aust.* p. 806, ♀.
Kirby, Mon. Ap. Angl. ii. 277. 58, ♀.
Apis fusca, *Christ. Hym.* p. 182. t. 14. f. 10, ♀.
Panz. Faun. Germ. 56. 11, ♀.
Anthophora fusca, *Fabr. Syst. Piez.* p. 377. 20, ♀.
Osmia bicolor, *Latr. Enc. Méth.* viii. 580. 10, ♀.
St. Farg. Hym. ii. 318. 7, ♂ ♀.
Smith, Zool. ii. 746. 9, ♂ ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. ii. *Supp.* 103.

Hab. Britain; France; Italy; Germany; Austria; Sweden.

11. Osmia fuciformis.

Osmia fuciformis, *Latr. Enc. Méth.* viii. 579. 8.
Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn. p. 270. 6.

Hab. Britain; France; Denmark.

12. Osmia hirta. B.M.

Apis hirta, *Fourc. Ent. Par.* ii. 444. 6, ♀.
Apis fulviventris, *Panz. Faun. Germ.* 56. 18.
Apis Leaiana, *Kirby, Mon. Ap. Angl.* ii. 263. 54, ♀.
Osmia Leaiana, *Spin. Ins. Lig.* fasc. 3. 200. 1, ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 262. 3, ♀.
Osmia fulviventris, *Latr. Enc. Méth.* viii. 578. 7.
St. Farg. Hym. ii. 319. 9, ♂ ♀.
Brullé, Hist. Nat. Il. Canar. ii. pt. 2. *Entom.* p. 85. 18.
Lucas, Explo. Sc. Algér. iii. 192. 115.
Nyland. Ap. Boreal. Revis. p. 272. 10.
Osmia hirta, *Smith, Zool.* ii. 742. 3.

Hab. Britain; France; Germany; Italy; Spain; Denmark; Sweden; Finland.

13. Osmia byssina.

Apis byssina, *Panz. Faun. Germ.* 56. 21.
Anthophora byssina, *Fabr. Syst. Piez.* p. 378. 28.
Panz. Krit. Revis. 245.
Osmia byssina, *Spin. Ins. Lig.* fasc. 3. p. 201. 3.
Hab. Italy; Germany; Moravia.

14. Osmia tricornis. B.M.

Osmia tricornis, *Latr. Enc. Méth.* viii. 575. 1.
St. Farg. Hym. ii. 316. 4.
Lucas, Explo. Sc. Algér. iii. 188. 104.
Hab. France.

15. Osmia interrupta. B.M.

Osmia interrupta, *Latr. Enc. Méth.* viii. 583. 16.
Hab. Spain.

16. Osmia melanippa.

Osmia melanippa, *Spin. Ins. Lig.* fasc. 2. p. 67.
Hab. Italy.

17. Osmia Gallarum.

Osmia Gallarum, *Spin. Ins. Lig.* fasc. 2. p. 69. 49.
Latr. Enc. Méth. viii. 582. 14.
Hab. Italy; France.

18. Osmia fulvo-hirta. B.M.

Osmia fulvo-hirta, *Latr. Enc. Méth.* viii. 580. 11.
St. Farg. Hym. ii. 322. 12.
Hab. France.

19. Osmia fronticornis. B.M.

Apis fronticornis, *Panz. Faun. Germ.* 63. 20.
Anthophora fronticornis, *Fabr. Syst. Piez.* p. 376. 17.
Osmia fronticornis, *Spin. Ins. Lig.* fasc. 3. p. 200. 2.
Latr. Enc. Méth. viii. 577. 4.
St. Farg. Hym. ii. 315. 3.
Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn. p. 269. 3.
Hab. France; Germany; Italy; Switzerland; Denmark; Sweden.

20. Osmia angustula.

Anthophora angustula, *Zett. Ins. Lapp.* p. 466. 7.
Osmia angustula, *Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 271. 8.
Hab. Sweden; Finland; Lapland.

21. Osmia notata.

Osmia notata, *Latr. Enc. Méth.* viii. 582. 13.
Hab. France; Sweden.

22. Osmia inermis.

Anthophora inermis, *Zett. Ins. Lapp.* p. 466. 6.
Osmia inermis, *Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 270. 7.
Hab. Sweden; Finland; Lapland.

23. Osmia nasidens.

Osmia nasidens, *Latr. Enc. Méth.* viii. 578. 6.
Hab. France.

24. Osmia serratulæ. B.M.

Trachusa serratulæ, *Panz. Faun. Germ.* 96. 15, ♂.
Anthophora byssina, *Fabr. Syst. Piez.* p. 378. 28.
Osmia serratulæ, *Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 273. 17.
Hab. France; Germany; Sweden; Finland.

25. Osmia mitis.

Osmia mitis, *Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn.* p. 272. 14.
Hab. Sweden; Lapland.

26. Osmia tuberculata.

Osmia tuberculata, *Nyland. Ap. Boreal. Act. Soc. Sc. Fenn.* i. 263; *Revis. Ap. Boreal.* p. 272. 13.
Hab. Sweden; Finland.

27. Osmia punctulatissima.

Osmia punctulatissima, *St. Farg. Hym.* ii. 329. 21.
Hab. France. (Coll. W. W. Saunders, Esq.)

28. Osmia hyalinipennis.

Osmia hyalinipennis, *St. Farg. Hym.* ii. 329. 20.
Hab. France.

29. Osmia marginella. B.M.

Osmia marginella, *St. Farg. Hym.* ii. 320. 10.
Hab. France.

30. Osmia Pyrenæa.

Osmia Pyrenæa, *St. Farg. Hym.* ii. 319. 9.
Hab. France (Pyrenees).

31. Osmia emarginata. B.M.

Osmia emarginata, *St. Farg. Hym.* ii. 317. 6.
Hab. France.

32. Osmia Spinolæ.

Osmia Spinolæ, *St. Farg. Hym.* ii. 328. 19.
Lucas, Explo. Sc. Algér. iii. 192. 113. t. 7. f. 10.
Hab. France; Algeria.

33. Osmia annulata.

Osmia annulata, *Latr. Enc. Méth.* viii. 587. 24.
Hab. Spain.

34. Osmia versicolor.

Osmia versicolor, *Latr. Enc. Méth.* viii. 586. 23.
Hab. Marseilles.

35. Osmia andrenoides.

Osmia andrenoides, *Spin. Ins. Lig.* fasc. 2. p. 61. 66.
Latr. Enc. Méth. viii. 586. 22.
Hab. France; Italy.

36. Osmia jucunda. B.M.

Female. Length 4½ lines.—Black, the head as large as the thorax, the face clothed with white pubescence, on the vertex it is thin, short and fulvous; the disk of the thorax clothed with bright fulvous pubescence, on the sides of the metathorax it is pale, and beneath it is short, sparing and white; wings subfuscous, their base and some irregularly scattered spots hyaline; the legs have a short white pubescence, the tarsi beneath rufo-fuscous, the claws ferruginous. Abdomen shining and strongly

punctured, the sides and apical margin of the basal segment, as well as the margins of the following segments, fringed with pale ochraceous pubescence, the fascia on the first and second interrupted in the middle, beneath densely clothed with dark brown pubescence.

Hab. Albania.

37. Osmia apicata. B.M.

Female. Length 5 lines.—Head blue-green, the rest of the insect of a bronze-green, the clypeus covered with pale pubescence, at the insertion of the antennæ a tuft of dark fulvous pubescence; the thorax and three basal segments of the abdomen covered with long pale fulvous pubescence, on the three apical segments it is black, and beneath is densely clothed with bright fulvous; the femora fringed with long pale fulvous pubescence, on the tarsi beneath it is bright fulvous; the claw-joints of the tarsi ferruginous, the calcaria pale rufo-testaceous; wings hyaline, faintly clouded at their apical margins.

Hab. Albania.

38. Osmia sybarita. B.M.

Female. Length 4 lines.—Black, the head and thorax closely and strongly punctured, the mandibles ferruginous at their apex; on each side of the face is a little white pubescence, on the vertex and disk of the thorax it is fulvous; the wings subhyaline, their apical margins slightly clouded; the posterior legs above have a short white pubescence, on the tarsi beneath it is pale fulvous, the claws ferruginous; the abdomen thickly covered with subelongate punctures, the apical margins of the segments have a fascia of white pubescence, usually interrupted on the two basal, and sometimes also on the third segment; beneath, the pollen-brush is of a changeable golden lustre.

Hab. Albania.

39. Osmia Latreillii. B.M.

Megachile Latreillii, *Spin. Ins. Lig.* fasc. 1. p. 31. 12. t. 2. f. 3, ♀; fasc. 3. p. 202. 1, ♂.

Osmia Latreillii, *Latr. Enc. Méth.* viii. 577. 4.
St. Farg. Hym. ii. 317. 5.
Lucas, Explo. Sc. Algér. iii. 189. 105.

Hab. France; Italy; Sicily; Albania; Portugal; Egypt; Algeria.

40. Osmia adunca. B.M.

Apis adunca, *Panz. Faun. Germ.* 56. 5.
Anthophora adunca, *Fabr. Syst. Piez.* p. 380. 36.
Megachile phæoptera, *Spin. Ins. Lig.* fasc. 1. p. 136. 4? (exclusive ♂).
Osmia adunca, *Latr. Enc. Méth.* viii. 585. 20.
St. Farg. Hym. ii. 327. 18.
Lucas, Explo. Sc. Algér. iii. 192. 114.
Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn. p. 272. 15.
Hoplitis adunca, *Klug, Illig. Mag.* vi. 221.
Hab. France; Germany; Italy; Albania; Denmark; Algeria.

41. Osmia melanogastra. B.M.

Osmia melanogaster, *Spin. Ins. Lig.* ii. 63. 47.
Latr. Enc. Méth. viii. 582. 15.
Osmia melanogastra, *St. Farg. Hym.* ii. 326. 17.
Lucas, Explo. Sc. Algér. iii. 191. 112.
Megachile notata, *Spin. Ins. Lig.* fasc. 1. p. 146. 17?
Hab. France; Italy; Spain; Algeria.

42. Osmia ferruginea.

Osmia ferruginea, *Latr. Enc. Méth.* viii. 579. 9.
St. Farg. Hym. ii. 325. 15.
Brullé, Hist. Nat. Il. Canar. ii. pt. 2. *Entom.* p. 85. 17.
Lucas, Explo. Sc. Algér. iii. 190. 108.
Hab. Egypt; Algeria; Morea; Barbary.

43. Osmia rufigastra. B.M.

Osmia rufigastra, *St. Farg. Hym.* ii. 324. 14.
Lucas, Explo. Sc. Algér. iii. 189. t. 7. f. 7.
Hab. Algeria.

44. Osmia luctuosa. B.M.

Osmia luctuosa, *Lucas, Explo. Sc. Algér.* iii. 190. t. 7. f. 8.
Hab. Algeria.

45. Osmia metallica. B.M.

Osmia metallica, *Lucas, Explo. Sc. Algér.* iii. 191. t. 7. f. 9.
Hab. Algeria.

46. Osmia fasciata.

Osmia fasciata, *Latr. Enc. Méth.* viii. 583. 17.
Hab. Arabia.

47. Osmia spinigera.

Osmia spinigera, *Latr. Enc. Méth.* viii. 584. 18.
Hab. Egypt.

48. Osmia fervida. B.M.

Male. Length 4 lines.—Black, the face below the insertion of the antennæ clothed with pale fulvous pubescence, that on the vertex and on the disk of the thorax is black; the cheeks, thorax beneath and the legs have a short griseous pubescence; the apical joints of the tarsi ferruginous; wings fusco-hyaline, the nervures black. The abdomen above densely clothed with short fulvous pubescence; the margin of the apical segment entire.
Hab. Port Natal.

49. Osmia frigida. B.M.

Female. Length 5 lines.—Black, the head has an ochraceous pubescence, which is dense on the face, and sparing on the cheeks and vertex. Thorax, the disk thickly clothed with ochraceous pubescence, the femora have a thin fringe beneath of the same colour, on the tibiæ and tarsi it is fuscous; wings subhyaline, their apical margins faintly clouded; the two basal segments of the abdomen thinly clothed with ochraceous pubescence; on the third, fourth and fifth it is black; the apical segment covered with very short ochraceous pubescence; beneath it is dense and black.
Male. Length 3–4 lines.—The clypeus covered with long white pubescence, on the vertex and disk of the thorax it is long, thin, and pale ochraceous; the base of the abdomen has a little scattered long pale pubescence, otherwise it is short, sparing and fuscous; the margin of the fifth segment fringed with brown pubescence; the sixth segment has down the middle a shallow longitudinal channel; the apical margin entire.
Hab. Hudson's Bay.

50. Osmia simillima.

Female. Length 4½ lines.—Steel-blue, head as wide as the thorax, the face, sides of the thorax and abdomen thinly covered with griseous pubescence, the entire insect closely and rather strongly punctured; the wings subhyaline, their apical margins faintly clouded; the legs have a griseous pubescence, that on the tarsi beneath brown; the abdomen beneath densely clothed with black pubescence.
Male. Length 4 lines.—Head and thorax of a bronzed green, abdomen blue; the antennæ a little longer than the head and

thorax, setaceous, fulvo-testaceous beneath; the face thickly covered with long white pubescence, a similar pubescence is also more thinly scattered over the vertex, thorax and base of the abdomen; wings as in the female; the apical segment notched in the middle; beneath, the ventral segment is bidentate.

Obs. This species very closely resembles the *Osmia cærulescens*; the female is difficult to distinguish; it differs in being larger and of a brighter blue, and in wanting the smooth, shining space below the post-scutellum always present in *O. cærulescens*. The male differs in the form and pale colour of the antennæ beneath, and in the margin of the apical segment being deeply notched in the middle and entire laterally.

Hab. Nova Scotia; U. States. (Coll. Lieut. Redman.)

51. Osmia chalybea. B.M.

Female. Length 6 lines.—Steel-blue, head very large subquadrate, and thorax strongly and closely punctured, the abdomen more finely so; the anterior margin produced in the middle, the apex of the lobe emarginate, the margin on each side is crenulated; the mandibles very large, a deep groove running along their inferior margin from the apex to the base, where it terminates in a pit or hollow. Thorax, the sides thinly covered with griseous pubescence; wings fuscous, palest towards the base; the sides of the abdomen fringed with short griseous pubescence; beneath densely clothed with black pubescence.

Male.—Closely resembles the female, the margin of the clypeus in this sex is entire, and the margin of the apical segment notched in the middle; beneath, the ventral segment bidentate.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

52. Osmia bucconis. B.M.

Osmia bucconis, *Say*, *Bost. Journ. Nat. Hist.* i. 400. 2.

Hab. United States.

53. Osmia lignaria. B.M.

Osmia lignaria, *Say*, *Bost. Journ. Nat. Hist.* i. 399. 1.
Osmia purpurascens, *Smith*, *Zool.* vii. *App.* lviii.

Obs. This species by some mistake was placed in the British Collection, and a label of locality in error attached.

Hab. United States.

Genus 10. ANTHOCOPA.

Apis, *Latr. Hist. Nat. Fourm.* 302 (1802).
Megachile, pt., *Latr. Hist. Nat.* xiv. 57. sec. 7 (1805).
Osmia, pt., *Latr. Enc. Méth.* viii. 585.
Anthocopa, *St. Farg. Hist. Nat. Ins.* ii. 349 (1841).

1. ANTHOCOPA PAPAVERIS. B.M.

Apis papaveris, *Latr. Hist. Nat. Fourm.* p. 302. t. 12. f. 1, ♂ ♀.
Megachile papaveris, *Latr. Hist. Nat.* xiv. 57. 12.
Panz. Faun. Germ. 105. 16, 17.
Osmia papaveris, *Latr. Enc. Méth.* viii. 585. 21.
Spin. Ins. Lig. fasc. 3. p. 201. 4.
Anthocopa papaveris, *St. Farg. Hym.* ii. 349. 1.
Latr. Enc. Méth. x. 314.
Smith, Zool. vi. 2213.
Coqueb. Icon. sec. 3. t. 21. f. 10.
Reaum. Ins. vi. 13. t. 13. f. 1.
Andrena tapissière, *Oliv. Enc. Méth.* iv. 140.
Hab. Britain?; France; Germany.

Genus 11. LITHURGUS.

(Details, Plate V.)

Andrena, pt., *Fabr. Ent. Syst.* ii. 308.
Centris, pt., *Fabr. Syst. Piez.* p. 357.
Lithurgus, *Latr. Gen. Crust. et Ins.* ii. 350.

1. LITHURGUS CORNUTUS. B.M.

Andrena cornuta, *Fabr. Ent. Syst.* ii. 308. 4.
Oliv. Enc. Méth. iv. *Ins.* 135. 4.
Lasius cornuta, *Panz. Faun. Germ.* 94. 11.
Centris cornuta, *Fabr. Syst. Piez.* p. 357. 13.
Lithurgus cornutus, *Latr. Gen. Crust. et Ins.* ii. 350.
Fonscol. Ann. Soc. Ent. Fr. iii. 219. t. 1 *d.* 1 ♀.
St. Farg. Hym. ii. 344. 1.
Hab. Provence.

2. LITHURGUS CHRYSURUS.

Lithurgus chrysurus, *Fonscol. Ann. Soc. Ent. Fr.* iii. 220. 2. t. 1 D. f. 2 ♀, 1 ♂.
Hab. Provence; Spain. (Coll. W. W. Saunders, Esq.)

3. Lithurgus analis.

Lithurgus analis, *St. Farg. Hym.* ii. 347. 6.
Hab. France.

4. Lithurgus fuscipennis.

Lithurgus fuscipennis, *St. Farg. Hym.* ii. 347. 5.
Hab. France.

5. Lithurgus hæmorrhoidalis.

Lithurgus hæmorrhoidalis, *St. Farg. Hym.* ii. 346. 4.
Hab. Sicily.

6. Lithurgus umbraculatus. B.M.

Lithurgus umbraculatus, *St. Farg. Hym.* ii. 345. 2.
Hab. ——?

7. Lithurgus atratus, n. s. B.M.

Female. Length 5 lines.—Black, the sides of the face and front of the clypeus covered with silvery-white pubescence, antennæ beneath from the fourth joint to the apex testaceous; below the antennæ is an elevation, truncated at its inferior margin, which is rounded. Thorax, the disk anteriorly coarsely rugose, wings fusco-hyaline and having a slight purple iridescence; at the sides of the metathorax are tufts of white pubescence. Abdomen flat, shining and finely punctured, the margins of the segments have a narrow fascia of white pubescence, which is continued beneath; the apical segment covered with black pubescence; the pollen-brush is thin, and of a brownish black.

Of four specimens in the Collection only one retains the marginal fascia above, but all have them beneath, where it is not so liable to be rubbed off.
Hab. India.

8. Lithurgus rufipes, n. s. B.M.

Female. Length 4 lines.—Black, the head broad, depressed, the face as high as the anterior stemma, covered with white pubescence; the clypeus naked, shining and coarsely punctured; mandibles ferruginous, black towards their base; the cheeks and thorax beneath thinly covered with griseous pubescence; legs ferruginous; the tegulæ pale ferruginous, wings subhyaline; a narrow fuscous cloud extends from the stigma to the apex of the wings; the nervures fuscous; a line of short white pubescence crosses the thorax from wing to wing, traversing the margin of

the scutellum. Abdomen pointed at the apex, shining, and having a metallic iridescence; the extreme lateral margins of the segments have a white fringe; the brush on the abdomen beneath yellowish white.

Hab. Port Natal.

9. LITHURGUS RUBRICATUS, n. s. B.M.

Female. Length 5½ lines. — Black, the face covered with silvery-white pubescence, at the base of the clypeus is a rugose elevation or tubercle, the flagellum of the antennæ rufo-piceous beneath. Thorax, the disk rugose, the tubercles fringed with white pubescence, the sides of the metathorax covered with a mixture of black and griseous pubescence; wings hyaline, their nervures black. Abdomen, the apical margins of the segments fringed with ochraceous pubescence; the apex clothed with bright ferruginous pubescence; beneath, the pollen-brush is fulvous, brightest towards the apex.

Male.—Similarly coloured to the female, the face not tuberculate, the tarsi elongate, slender, the claw-joint rufo-testaceous; about the middle of the basal joint of the posterior tarsi within is a thin raised oblong tooth or elevation; the posterior coxæ and femora incrassate, the femora slightly bent.

Hab. New Holland.

10. LITHURGUS DENTIPES, n. s. B.M.

Male. Length 5 lines.—Black, the face has a clothing of very pale yellow pubescence, that on the sides of the thorax is fusco-griseous; flagellum testaceous beneath, mandibles tridentate. Thorax, the disk thinly covered with ochraceous pubescence; wings subhyaline, nervures ferruginous; the legs beneath fringed with sooty-black pubescence; the apical joints of the tarsi rufo-testaceous, the claw-joint as long as the three preceding ones; the posterior coxæ and femora incrassate, the latter somewhat flattened beneath and produced at its apex on each side, forming two flat broad teeth or spines; the spines which arm the apex of the tibiæ black, long and stout. Abdomen short, flat, and having the margins slightly testaceous; at the base, sides and apex a short black pubescence.

Hab. New Holland.

11. LITHURGUS TUBERCULATUS.

Lithurgus tuberculatus, *St. Farg. Hym.* ii. 346. 3.

Hab. South America?

12. Lithurgus gibbosus, n. s. B.M.

Female. Length 7 lines.—Black, in front of the antennæ is a transverse curved elevation, which is concave in front, shining, and sprinkled with large deep punctures; at the base of the antennæ, down the sides of the face, and on the margin of the clypeus covered with white pubescence, that on the latter has some fulvous hairs intermixed. Thorax, disk much elevated and coarsely rugose; the pubescence in front and on the sides white, thickest at the sides of the metathorax, that on the legs is also white; the anterior and intermediate tarsi covered with long pubescence, that on the former has a slight yellowish stain, that on the latter pale fulvous; posterior tarsi wanting; wings fusco-hyaline, palest at their apical margins. Abdomen much depressed at the base, the margins of the segments laterally have a narrow white fringe; the apical segment above densely covered with black pubescence, the pubescence on the abdomen beneath pale yellow.

Hab. United States.

13. Lithurgus compressus, n. s. B.M.

Male. Length 5–5½ lines.—Black, the face covered with a silvery-white pubescence, on the cheeks, legs and sides of the thorax it is of the same colour; wings fusco-hyaline; claw-joint of the tarsi ferruginous, the calcaria testaceous. Abdomen much flattened, the margins of the segments depressed and having a fascia of white pubescence, more or less interrupted; the apical segment produced into a short point or style at the apex.

Hab. United States. (E. Doubleday, Esq.)

Genus 12. CHALICODOMA.

Apis, pt., *Fabr. Ent. Syst. Supp.* p. 274.
Xylocopa, pt., *Fabr. Syst. Piez.* p. 342.
Megachile, pt., *Latr. Hist. Nat. Crust. Ins.* iv.
Chalicodoma, *St. Farg. Hym.* ii.

1. Chalicodoma muraria. B.M.

Apis muraria, *Fabr. Ent. Syst. Supp.* p. 274. 50.
Xylocopa muraria, *Fabr. Syst. Piez.* p. 342. 17.
Megachile muraria, *Latr. Hist. Nat. Crust. Ins.* xiv. 60. 15; *Gen. Crust. Ins.* ii. 349.
Spin. Ins. Lig. i. 148. 17.

Chalicodoma muraria, *St. Farg. Hym.* ii. 309. 1. t. 18. f. 2, nest.
Brullé, Hist. Nat. Il. Canar. ii. 85. 13.
Lucas, Explo. Sc. Algér. iii. 193. 117.

Hab. France; Spain; Portugal; Albania; Italy, &c.; Africa (Algeria).

2. Chalicodoma sicula.

Apis sicula, *Rossi, Mant. Faun. Etrus. Append.* ii. 139. t. 4. fig. D, *d*, E, ♀.
Megachile sicula, *Latr. Gen. Crust. Ins.* ii. 349.
Chalicodoma sicula, *St. Farg. Hym.* ii. 311. 3. t. 20. f. 3, ♀.
Brullé, Hist. Nat. Il. Canar. ii. 85. 14.
Lucas, Explo. Sc. Algér. iii. 194. 119.

Hab. France; Italy; Canary Islands; Algeria.

3. Chalicodoma canescens.

Osmia (Chalicodoma) canescens, *Brullé, Hist. Nat. Il. Canar.* ii. 85. 15.
Chalicodoma canescens, *St. Farg. Hym.* ii. 311. 4.

Hab. Canary Islands.

4. Chalicodoma rufitarsis.

Chalicodoma rufitarsis, *St. Farg. Hym.* ii. 310. 2.
Lucas, Explo. Sc. Algér. iii. 193. 118.

Hab. Algeria.

5. Chalicodoma semivestita.

Male. Length 7 lines.—Black, the head and thorax densely covered with short fulvo-ochraceous pubescence, the metathorax and sides of the thorax beneath, and the wings posteriorly clothed with black; the breast and anterior femora beneath have an ochraceous pubescence; that on the intermediate and posterior legs and also on the abdomen is black; the wings have a pale violet tinge, the tegulæ pale testaceous, the nervures black; the margin of the apical segment of the abdomen notched.

Hab. India. (Coll. F. Smith.)

Subfam. 2. DASYGASTRÆ.

Dasygastræ, *Latr. Règne Anim.* v. 347 (1829).
Longilabres, *Westw. Intr. Class.* (1840).
Megachilides, *Westw. Intr. Class.* (1840).

Genus 13. MEGACHILE.

(Details, Plate V.)

Apis, pt., *Linn. Faun. Suec.* p. 419 (1687).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Anthidium, pt., *Fabr. Syst. Piez.* p. 364 (1804).
Anthophora, pt., *Fabr. Syst. Piez.* p. 372 (1804).
Megachile, pt., *Latr. Hist. Nat.* xiv. 51 (1805).
Trachusa, pt., *Jurine, Hym.* (1808).

1. MEGACHILE CENTUNCULARIS. B.M.

Apis centuncularis, *Linn. Faun. Suec.* 1687; *Syst. Nat.* i. 953. 4.
Scop. Ent. Carn. p. 799.
Fabr. Syst. Ent. p. 385. 42; *Ent. Syst.* ii. 337. 98.
Fourc. Ent. Par. ii. 443. 5.
Schäff. Icon. t. 262. f. 6, 7.
Rossi, Faun. Etrus. p. 927.
Kirby, Mon. Ap. Angl. ii. 237. 42.
Apicis fastuosus, *Harris, Expos.* p. 165. 13. t. 50. f. 13.
Megachile centuncularis, *Latr. Ins.* iii. 383; *Hist. Nat. Crust. Ins.* xiv. 56. 10.
Spin. Ins. Lig. i. 142. 10.
St. Farg. Hym. ii. 337. 12. t. 21. f. 3, ♀.
Guér. Ic. R. Anim. p. 449. t. 73, ♀.
Smith, Zool. ii. 695. 7.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 258. 4.
Anthophora centuncularis, *Fabr. Syst. Piez.* p. 378. 25.
Zett. Ins. Lapp. p. 465. 3.
Reaum. Ins. vi. *Mém.* iv. t. 10. f. 2, 3, 4.
Frisch. Ins. pt. xi. t. 2. f. 1–4.
Geoff. Ins. Par. ii. 410. 5.

Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland; Lapland; N. America; Hudson's Bay; Canada.

Specimens from the above localities are in the British Museum, in which no difference can be detected, both the sexes agreeing precisely with British and other European examples.

2. Megachile parvula. B.M.

Megachile parvula, *St. Farg. Hym.* ii. 341. 14.
Hab. France.

3. Megachile argentata.

Apis argentata, *Fabr. Ent. Syst.* ii. 336. 96.
Anthophora argentata, *Fabr. Syst. Piez.* p. 377. 22.
Panz. Faun. Germ. 99. 16.
Apis Leachella (*Kirby, MSS.*), *Steph. Syst. Cat.* p. 374. 5061.
Megachile argentata, *St. Farg. Hym.* ii. 343. 17.
Spin. Ins. Lig. i. 140. 9.
Lucas, Explo. Sc. Algér. iii. 196. 123.
Megachile albiventris, *Smith, Zool.* ii. 696. 8.
Megachile Leachella, *Nyland. Revis. Ap. Boreal.* p. 276. 7.
Hab. Britain; France; Germany; Africa (Algeria); Denmark; Sweden.

4. Megachile rufitarsis.

Megachile rufitarsis, *Smith, Zool.* ii. 695. 2, ♂.
Megachile fasciata, *Smith, Zool.* ii. 694. 5, ♀.
Megachile pyrina, *St. Farg. Hist. Nat. Ins.* ii. 334. 8, ♂ ♀?
Hab. Britain.

5. Megachile ligniseca. B.M.

Apicis centuncularis, *Harris, Expos.* p. 162. 2. t. 49. f. 2.
Apis centuncularis, *Panz. Faun. Germ.* 55. 12.
Don. Brit. Ins. iv. t. 120.
Apis ligniseca, *Kirby, Mon. Ap. Angl.* ii. 243. 44.
Megachile ligniseca, *Smith, Zool.* ii. 694. 4.
Nyland. Adnot. Ap. Boreal. Süllsk. Faun. Flo. Fenn. ii. *Supp.* 102, ♀.
Hab. Britain; France; Germany; Denmark; Sweden.

6. Megachile versicolor.

Megachile versicolor, *Smith, Zool.* ii. 697. 9.
Hab. Britain.

7. Megachile odontura. B.M.

Megachile odontura, *Smith, Zool.* vii. *App.* 58.
Hab. Britain.

8. Megachile Dufourii.

Megachile Dufourii, *St. Farg. Hym.* ii. 337. 11.
Hab. France.

9. MEGACHILE 8-SIGNATA. B.M.

Megachile 8-signata, *Nyland. Revis. Ap. Boreal.* p. 274. 1.
Hab. France.

10. MEGACHILE PYRENAICA.

Megachile pyrenaica, *St. Farg. Hym.* ii. 336. 10.
Lucas, Explo. Sc. Algér. iii. 195. 121. t. 8. f. 2.
Hab. France.

11. MEGACHILE CRISTATA.

Megachile cristata, *Fonscol. Ann. Soc. Ent. Fr.* 2me sér. iv. 46. 5.
Hab. South of France.

12. MEGACHILE SERICANS. B.M.

Megachile sericans, *Fonscol. Mag. Zool.* 1832, t. 50, ♀.

Male.—This sex resembles the female, the thorax and legs beneath densely pubescent, all the femora being thickly fringed, the anterior coxæ have blunt spines, the anterior legs in front and their tarsi testaceous, the latter not dilated, at the apex of the basal joint beneath is a black dot; the abdomen beneath rufo-testaceous, the margin of the apical segment has numerous short teeth.
Hab. Provence; Albania.

13. MEGACHILE ALBO-CRISTATA, n. s. B.M.

Female. Length 6 lines.—Black, the pubescence on the face brown-black, on the vertex it is black. Thorax, the pubescence black, as also on the legs; on each side of the metathorax is a tuft of white pubescence; wings dark fuscous, having a violet iridescence; the posterior wings paler, particularly at their base; the pubescence on the intermediate tarsi above and on all the tarsi beneath fulvous, the claws rufo-testaceous. Abdomen, on each side of the basal segment a tuft of white pubescence, a patch of short pubescence of the same colour on each side of the second, third, and sometimes on the fourth segment, between which the pubescence is black; beneath, the pollen-brush is black, obscurely fulvous in the middle.
Hab. Albania.

14. MEGACHILE MARGINATA, n. s.

Female. Length 5 lines.—Black, the face below the insertion of the antennæ densely covered with white pubescen e, above it is pale yellow, as it is also on the disk of the thorax; the flagel-

lum ferruginous beneath, its basal joints obscurely so above; tips of the mandibles ferruginous. Thorax, the sides beneath the wings, and of the metathorax, covered with long white pubescence; the margins of the scutellum have a border of short white pubescence; wings hyaline, the tegulæ and nervures pale ferruginous; the legs dark rufo-testaceous, covered with a short glittering white pubescence, the tarsi fulvous beneath; the extreme apex of the anterior and intermediate tibiæ as well as the claw-joint of the tarsi ferruginous. Abdomen, the basal segment covered with long white pubescence, particularly at the sides; the apical margins of all the segments have a fascia of white pubescence; beneath, the pollen-brush is composed of long white pubescence.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

15. MEGACHILE APICALIS. B.M.

Megachile apicalis, *Spin. Ins. Lig.* fasc. 4. p. 259.
Osmia apicalis, *Brullé, Hist. Nat. Il. Canar.* p. 86. 21.

Hab. Italy; Canaries.

16. MEGACHILE FULVESCENS, n. s.

Female. Length 6 lines.—Black, the face densely clothed with fulvous pubescence, that on the cheeks is much paler. Thorax covered with fulvous pubescence; beneath, as well as on the legs, it is of a paler hue, on the tarsi beneath it is bright fulvous; the claws ferruginous, their tips black; wings subhyaline, the tegulæ and nervures ferruginous. Abdomen, the four basal segments have a fulvous pubescence, on the two apical ones it is black; the apical margins of all the segments have a narrow fascia of pale fulvous pubescence; beneath, the pollen-brush is of a golden hue towards the base, becoming bright fulvous at the apex.

Hab. Sicily. (Coll. F. Smith.)

17. MEGACHILE SERRATA, n. s.

Male. Length 5 lines.—Black, the face below the insertion of the antennæ and the cheeks densely covered with white pubescence, that on the head above the antennæ, on the disk of the thorax and two basal segments of the abdomen is ochraceous, on the rest of the abdomen it is black; the thorax beneath, coxæ and femora densely covered with long pale ochraceous pubescence, the tibiæ and tarsi have an ochraceous pubescence, the claws testaceous; wings subhyaline, the nervures testaceous. Abdomen, the apical segment deeply depressed in the middle, its margin furnished with numerous teeth.

Hab. Sicily. (Coll. F. Smith.)

18. Megachile Willughbiella. B.M.

Apis Willughbiella, *Kirby, Mon. Ap. Angl.* ii. 233. 41.
Megachile Willughbiella, *Latr. Hist. Nat.* xiv. 57. 11.
Curt. Brit. Ent. v. t. 218.
St. Farg. Hym. ii. 333. 5.
Smith, Zool. ii. 691. 1.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. i. 256. 2, not the ♀.
Megachile fulviventris, *Zett. Ins. Lapp.* p. 465. 2.
Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

19. Megachile maritima. B.M.

Apis maritima, *Kirby, Mon. Ap. Angl.* ii. 242. 43.
Apis lagapoda, *Panz. Faun. Germ.* 55. 7; *Fabr. Ent. Syst.* ii. 325. 48.
Anthophora lagapoda, *Fabr. Syst. Piez.* p. 374. 9.
Megachile maritima, *Smith, Zool.* ii. 692. 2.
Hab. Britain; France; Germany.

20. Megachile lagapoda. B.M.

Apis lagapoda, *Linn. Faun. Suec.* 1702; *Syst. Nat.* p. 957. 27.
Megachile lagapoda, *Zett. Ins. Lapp.* p. 464. 1.
Nyland. Revis. Ap. Boreal. Act. Soc. Sc. Fenn. p. 275.
Hab. Denmark; Sweden; Finland; Lapland.

21. Megachile circumcincta. B.M.

Apis circumcincta, *Kirby, Mon. Ap. Angl.* ii. 246. 45, ♀.
Megachile circumcincta, *St. Farg. Hym.* ii. 335. 9.
Smith, Zool. ii. 693. 3, ♂ ♀.
Nyland. Ap. Boreal. Act. Soc. Sc. Fenn. ii. *Supp.* 103, ♀.
Hab. Denmark; Sweden; Finland.

22. Megachile analis. B.M.

Megachile apicalis, *Nyland. Ap. Boreal.* p. 257. 3 (nec *Spin.*).
Megachile analis, *Nyland. Revis. Ap. Boreal.* p. 275. 4.
Hab. Finland.

23. Megachile Caucasica.

Megachile Caucasica, *St. Farg. Hym.* ii. 330. 1.
Hab. The Caucasus.

24. Megachile Ghilianii.

Megachile Ghilianii, *Spin. Ann. Soc. Ent. Fr.* 2^me^ sér. i. 142. 31.
Hab. Spain.

25. Megachile albo-hirta.

Megachile albo-hirta, *Brullé, Hist. Nat. Il. Canar.* ii. 86. 22.
Hab. Canary Islands.

26. Megachile binominata.

Megachile cincta, *Brullé, Hist. Nat. Il. Canar.* ii. 85. 20, not of *Fabr.*
Hab. Canary Islands.

27. Megachile farinosa, n. s. B.M.

Female. Length 4½ lines.—Black, the face above the insertion of the antennæ as high as the anterior stemma covered with yellowish white pubescence, the clypeus strongly punctured and thinly covered with short fulvous hairs; the antennæ, labrum and mandibles red, the latter black at their apex, coarsely sculptured and armed with two teeth. Thorax, the disk covered with very short yellowish white pubescence; on the sides of the metathorax it is longer, as well as that on the sides, the latter being white; the legs, tegulæ and nervures towards the base of the wings pale red; wings hyaline, and having a fuscous cloud on their apical margins. Abdomen, the upper surface entirely covered with a short scale-like pubescence; beneath, the pollen-brush pale yellow.

Obs. The entire insect has the appearance of being covered with a white powder.
Hab. Turkey (Bagdad).

28. Megachile albo-picta, n. s. B.M.

Female. Length 4 lines.—Black, the head and thorax very closely punctured, the face clothed with snow-white pubescence, the clypeus covered with large deep punctures, leaving a smooth line down the centre; the mandibles sculptured with deep elongate punctures and grooved towards their apex, which is armed with several sharp teeth. Sides of the thorax covered with snow-white pubescence; the wings subhyaline, the nervures fuscous; the legs covered with white pubescence, the tarsi beneath with fulvous, the calcaria pale testaceous, claws ferruginous, their tips black. Abdomen shining, closely punctured at the base, more distantly towards the apex; on the margin of each segment is a snow-white fascia, usually interrupted on the disk, the fascia broadest at the sides, forming elongate pointed angular patches; beneath, the pollen-brush is black towards the base and white at the apex.
Hab. Algeria.

29. Megachile canescens, n. s. B.M.

Male. Length 4 lines.—Black, the face densely covered with pale ochraceous pubescence, on the vertex as well as on the disk of the thorax it is sparingly scattered and fuscous; on the entire insect beneath the pubescence is long and hoary, very dense on the head beneath; the sides of the thorax covered with hoary pubescence; the wings fusco-hyaline, the anterior tarsi not dilated, and the anterior coxæ unarmed; the tarsi beneath fulvous, the claws ferruginous, black at their tips, the calcaria pale testaceous. Abdomen short, very convex, the margins of the segments having laterally a white marginal fringe, continuous on the fifth and sixth segments, the apical segment notched in the middle and crenulated at the sides.

Obs. This is probably the male of *M. albo-picta*.

Hab. Algeria.

30. Megachile Lefebvræi.

Megachile Lefebvræi, *St. Farg. Hym.* ii. 332. 4.
Lucas, Explo. Sc. Algér. iii. 194. 120. t. 8. f. 1.

Hab. Algeria.

31. Megachile ericetorum.

Megachile ericetorum, *St. Farg. Hym.* ii. 341. 14.
Lucas, Explo. Sc. Algér. iii. 195. 122. t. 8. f. 3.

Hab. Algeria.

32. Megachile flavipes.

Megachile flavipes, *Spin. Ann. Soc. Ent. Fr.* vii. 527. 59.

Hab. Egypt.

33. Megachile patellimana.

Megachile patellimana, *Spin. Ann. Soc. Ent. Fr.* vii. 529. 71.

Hab. Egypt.

34. Megachile nigripes.

Megachile nigripes, *Spin. Ann. Soc. Ent. Fr.* vii. 529. 70.

Hab. Egypt.

35. Megachile gymnopygia.

Megachile gymnopygia, *Spin. Ann. Soc. Ent. Fr.* vii. 530. 72.

Hab. Egypt.

36. Megachile denticulata. B.M.

Megachile denticulata, *Fairm. Voy. Abyss.* (*Fer. & Gal.*) iii. 447. t. 29. f. 12 ♂, 13 ♀.

Guér. Voy. Abyss. (*Lefeb.*) vi. 363.

Hab. Abyssinia.

37. Megachile Atropos.

Female. Length 5 lines.—Black, the face naked, deeply punctured, the margin of the clypeus entire, transverse; the mandibles stout, their apical margins straight, meeting beneath the clypeus, rather finely sculptured longitudinally, more deeply so at their base. The disk of the thorax covered with a black velvety pubescence, the scutellum produced backwards; wings yellowish towards their base, faintly clouded towards their apex, the nervures testaceous; the legs have a black pubescence; the apical joints of the tarsi ferruginous, the posterior legs slightly so towards their base. Abdomen short, very convex; the margins of the segments rufo-testaceous as well as the basal segments beneath; the pollen-brush is of a pale glittering yellow at the base and black towards the apex of the abdomen.

Hab. The Gambia. (Coll. F. Smith.)

38. Megachile capitata, n. s. B.M.

Male. Length 2½ lines.—Black, the face covered with pale pubescence, which is yellowish towards the clypeus; head much wider than the thorax, the antennæ ferruginous beneath. Thorax, the pubescence griseous, the legs rufo-testaceous, anterior tarsi simple; wings hyaline, iridescent, their apical margins slightly clouded, tegulæ and nervures rufo-testaceous. Abdomen short, obtuse at the apex, at the base a little long griseous pubescence, the margins of the segments have a narrow fascia of pale pubescence; the apical segment vertical, covered with short white pubescence, its margin bidentate in the middle, the teeth short, and as well as the abdomen beneath rufo-testaceous.

Hab. The Gambia (Rendall). India (Coll. W. W. Saunders, Esq.).

39. Megachile torridus, n. s. B.M.

Female. Length 4½ lines.—Head and thorax black, the pubescence on the face is fusco-ferruginous, the basal joint of the antennæ dark ferruginous. Thorax, the pubescence on the disk is short, thin, and fulvous, at the sides of the metathorax it is dense and of a paler colour; wings fulvo-hyaline and having a broad dark fuscous margin, the tegulæ and nervures fulvous; legs ferruginous; the three basal segments of the abdomen fer-

ruginous, the apical three black, their pubescence also black; on the basal segments it is fulvous, palest at the sides of the basal segment; the pollen-brush beneath is fulvous, darkest towards the apex.

The male is similarly coloured to the female, the antennæ and anterior legs simple, the tarsi rufo-testaceous, the apex of the abdomen has two short blunt spines or tubercles.

Hab. The Gambia. (Rendall.)

40. MEGACHILE DISCOLOR, n. s.

Female. Length 5 lines.—Black, the face, cheeks and mandibles covered with griseous pubescence; the vertex, margin of the clypeus, and apex of the mandibles have a fulvous pubescence, the mandibles and labrum ciliated with long fulvous hairs. Thorax, the disk reddish, strongly punctured and densely clothed with short bright fulvous pubescence, on the sides and beneath it is very sparing and of a dark brown colour; the legs dark ferruginous, the pubescence on the anterior and intermediate pairs sooty-black, on the posterior pair it is griseous; wings fuscohyaline, darkest at the base and along the anterior margin, tegulæ rufo-testaceous. Abdomen convex above, thinly covered with a short griseous pubescence, the basal margins of the segments having a band of the same colour; the pollen-brush very pale yellow, nearly white.

Hab. The Gambia. (Coll. F. Smith.)

41. MEGACHILE ANGULATA, n. s. B.M.

Female. Length 5½ lines.—Black, the face and cheeks covered with snow-white pubescence, the mandibles very stout and furnished with four stout teeth. Thorax naked on the disk, which is closely and strongly punctured; the sides covered with snow-white pubescence, and on each side of the abdomen are five angular patches of similarly coloured pubescence; wings hyaline at the base and dark fuscous towards their apical margins, having a violet iridescence; the legs above have a griseous pubescence. Abdomen elongate, rather strongly punctured, each segment having in the middle a transverse depression; beneath, the pollen-brush is black, having a bright fulvous line in the centre not reaching the apex.

Hab. The Gambia. (Rendall.)

42. MEGACHILE MAXILLOSA. B.M.

Megachile maxillosa, *Guér. Icon. Reg. Anim.* p. 449; *Voy. Abyss.* (*Lefeb.*) vi. 363.

Hab. The Gambia.

43. Megachile fimbriata, n. s.

Male. Length 5½ lines.—Black, the face densely clothed with white pubescence, the flagellum ferruginous beneath; the mandibles very broad to about half their length, whence they are abruptly narrowed. Thorax, the disk thinly covered with a short fulvous pubescence, at the sides of the metathorax it is long and pale; wings subhyaline, their apical margins clouded; the anterior legs pale ferruginous, their tarsi dilated, pale ferruginous, and having a marginal fringe, white at the base and fulvous at its outer margin, the coxæ armed with stout spines; the intermediate and posterior legs dark ferruginous, their tarsi fringed with long white hairs. Abdomen, the pubescence at the sides cinereous, the basal segment has a fringe of short bright fulvous pubescence, on the other segments it is paler, and on the apical one it is very short and cinereous; the apex has a deep depression in the middle, bidentate in the centre and crenulated at the sides.

Hab. The Gambia. (Coll. F. Smith.)

44. Megachile imitata, n. s. B.M.

Female. Length 6 lines.—Black, the face has a sooty-black pubescence, the clypeus anteriorly broadly emarginate; mandibles longitudinally sculptured, having two or three grooves towards their apex, which is obsoletely bidentate, the tooth at the apex rounded; wings fuscous, at the sides of the metathorax a little fulvous pubescence, on other parts of the thorax it is sooty-black; on the legs above it is pale fulvous, and on the tarsi beneath bright fulvous; the calcaria and claws ferruginous. Abdomen entirely covered with fulvous pubescence.

Male.—Coloured as in the other sex, the face clothed with long white pubescence. Thorax, the tegulæ rufo-testaceous, the anterior femora, tibiæ and tarsi, and the apical joints of the intermediate and posterior tarsi, ferruginous; the posterior legs covered with cinereous pubescence, as well as the thorax and abdomen beneath.

Obs. This species in general appearance closely resembles *M. mystacea* and *M. rufiventris*, particularly the male: the most apparent differences are pointed out.

Hab. South Africa. (Dr. A. Smith.)

45. Megachile cyanipennis.

Megachile cyanipennis, *Guér. Icon. Reg. Anim.* p. 450; *Voy. Abyss.* (*Lefeb.*) vi. 363.

Hab. Senegal. (Coll. F. Smith.)

46. Megachile venusta, n. s. B.M.

Female. Length 3¾ lines.—Black, the sides of the face have a bright silvery-white pubescence, between the antennæ and above it is slightly fuscous; the cheeks, legs and thorax have a hoary pubescence, on the disk it is short, sparing and ochraceous; the wings hyaline, their nervures black; all the tarsi beneath fulvous, the calcaria pale testaceous, claws ferruginous. Abdomen gradually tapering to the apex, the basal segment has a little pale pubescence, the margins of the segments have a narrow white fascia; beneath, the pollen-brush is white towards the base and fulvous towards the apex.

Hab. Port Natal; Cape of Good Hope.

47. Megachile basalis, n. s. B.M.

Female. Length 5 lines.—Head and thorax black, the face covered with white pubescence; mandibles porrect, dark ferruginous, deeply sculptured longitudinally, and having three teeth at their apex; the pubescence on the thorax and legs cinereous; legs dark ferruginous, the basal joint of the posterior tarsi broadly dilated, all the tarsi fulvous beneath; wings hyaline, their nervures black. Abdomen red at the base, becoming gradually darker to the apex; the margins of the segments laterally have a pale fascia; the pollen-brush is of a bright golden yellow inclining to fulvous at the sides and towards the apex.

Hab. Port Natal.

48. Megachile perplexa, n. s.

Male. Length 4½ lines.—Black, the face clothed with pale fulvous pubescence, as are also the cheeks and body beneath; on the vertex, and on the disk of the thorax it is black, and brown at the sides of the metathorax; the wings subhyaline, faintly clouded at their apex; the tarsi beneath clothed with fulvous pubescence, the apical joints ferruginous, the anterior tarsi simple, the coxæ unarmed. Abdomen short and thickly clothed with bright fulvous pubescence; the sixth segment slightly produced in the middle and notched at the apex; beneath, the margins of the segments testaceous.

Obs. This is another of the species which closely resemble the *mystacea* of Fabr., but the colour of the wings and pubescence of the face at once distinguish it.

Hab. Port Natal. (Coll. W. W. Saunders, Esq.)

49. Megachile combusta, n. s. B.M.

Female. Length 10 lines.—Black, the head and thorax strongly

punctured, the face thinly clothed with a scattered black pubescence; the thorax, legs and basal segment of the abdomen densely clothed with intensely black pubescence; wings black, palest towards their apical margins and having a violet iridescence; the five apical segments of the abdomen clothed above with bright fulvous-red pubescence, beneath the pubescence is of the same colour but longer.

Hab. Port Natal.

50. MEGACHILE MACULATA, n. s.

Female. Length 4½ lines.—Black, the pubescence on the head, thorax and legs black, the flagellum fulvous beneath. Thorax, the wings fulvo-hyaline, their apical margins pale, tegulæ and nervures ferruginous; tarsi ferruginous and clothed with fulvous pubescence beneath; the abdomen shining, the second segment has a transverse arched depression, the second, third, fourth and fifth segments have on each side a transverse quadrate patch of yellow pubescence; the pollen-brush has the pubescence black at its base and pale towards the tips of the hairs.

Hab. Port Natal; Fernando Po. (Coll. F. Smith and W. W. Saunders, Esq.)

51. MEGACHILE SENEX, n. s.

Male. Length 5 lines.—Black, the face densely covered with long cinereous pubescence, very bright towards the apex of the clypeus; the cheeks have a thick fringe of the same colour, and a similar clothing is thinly scattered over the entire insect; the mandibles are longitudinally sculptured and have a long acute tooth at their apex. Thorax, the pubescence on the disk slightly ochraceous; wings subhyaline, faintly clouded at their apex, nervures testaceous; the apical joints of the tarsi rufo-testaceous, clothed beneath with bright fulvous pubescence; the anterior tarsi simple, fringed behind with long white hairs; the coxæ armed with an obtuse spine; the sixth segment of the abdomen rounded, recurved and notched in the middle, each angle of the notch having a short acute spine, beyond which the margin is crenulated; the seventh segment has a stout spine in the centre of its margin.

Hab. Port Natal. (Coll. W. W. Saunders, Esq.)

52. MEGACHILE MANDIBULATA, n. s. B.M.

Male. Length 5 lines.—Black, the face covered with long ochraceous pubescence, on the cheeks, thorax and abdomen be-

neath it is griseous; the mandibles very broad at their base and to half their length, when they are abruptly narrowed, forming a sharp angle or tooth, their apex acute. Thorax, the pubescence on the disk pale ochraceous, thinly scattered and intermixed with black hairs; wings hyaline, having a cloud at their apical margins, the nervures fusco-ferruginous; the anterior tarsi simple, the coxæ armed with obtuse spines; all the tarsi fulvous beneath, the claws ferruginous, their tips black. Abdomen shining and strongly punctured, the margins of the segments laterally are fringed with white pubescence, the fringe becoming narrower within, that on the fifth segment sometimes entire, the apex armed with four blunt teeth; the seventh segment is acute at its apex, having a raised sharp carina down the centre, a similar carina also runs down the centre of the sixth segment.

Obs. This is probably the male of *M. angularis*.

Hab. Port Natal; the Gambia.

53. Megachile cœlocera. B.M.

Male. Length 8 lines.—Black, the face covered with pale golden pubescence, the centre of the clypeus naked, shining and punctured, the cheeks fringed with long white pubescence; the antennæ subclavate, longitudinally grooved beneath. Thorax, the metathorax densely covered with sooty-black pubescence, that on the legs is short and black; the anterior tarsi dilated, the first joint broad at the base, much narrowed at the apex, its posterior margin rounded, the following joints gradually decreasing in width and somewhat heart-shaped, the whole fringed behind with ferruginous pubescence; the coxæ armed with a stout tooth; the wings dark fuscous, palest at their apical margins, and having a purple tinge. Abdomen bright fulvous, the basal segment being clothed with black pubescence; the apical segment armed with two incurving obtuse teeth, and also a short acute one at the extreme lateral margins.

Hab. Port Natal.

54. Megachile tarsata.

Anthidium tarsatum, *Fabr. Syst. Piez.* p. 365. 2.

Hab. Guinea.

55. Megachile cincta. B.M.

Apis cincta, *Fabr. Ent. Syst.* ii. 338. 102.
Centris cincta, *Fabr. Syst. Piez.* p. 358. 17.

Hab. Sierra Leone.

56. Megachile rufipes. B.M.

Apis rufipes, *Fabr. Ent. Syst.* ii. 328. 62.
Anthophora rufipes, *Fabr. Syst. Piez.* p. 374. 11.
Hab. Sierra Leone.

57. Megachile barbata, n. s.

Male. Length 4 lines.—Black, the face densely clothed with long pale ochraceous pubescence, which becomes nearly white towards the margin of the clypeus, the cheeks have a dense long white beard; the thorax beneath and all the legs have a similar white pubescence, on the thorax above it is slightly ochraceous; wings subhyaline, faintly clouded at their apical margins, the nervures black; the anterior tarsi and coxæ simple, the femora at their apex beneath rufo-testaceous, all the tarsi beneath fulvous, the calcaria pale testaceous, claws ferruginous, their tips black. Abdomen short, very convex above, the segments have a narrow white fascia, broadest at the sides, more or less interrupted on the three basal segments, the apical segment irregularly dentate and notched in the middle.
Hab. Cape of Good Hope. (Coll. F. Smith.)

58. Megachile ungulata, n. s.

Male. Length 4½ lines. — Black, head broader than the thorax; the face densely covered with a bright pale yellow pubescence, on the vertex it inclines to fulvous; on the cheeks, thorax and legs beneath, it is of a very pale bright yellow; apex of the mandibles ferruginous; legs dark rufo-testaceous, the anterior femora and tibia in front and their tarsi testaceous, the latter slightly dilated and fringed with white pubescence; apical joints of the tarsi bright ferruginous, the claw-joints as long as the rest of the tarsi, tips of the claws black; the posterior tibiæ inerassate. Abdomen short, and having at the base some long fulvous pubescence; the sides of the three basal segments pale rufo-testaceous, which is the colour of the abdomen beneath; the margins of the three apical segments above narrowly testaceous; towards the apex the pubescence is fuscous, intermixed with fulvous; the sixth segment notched in the middle.
Hab. Cape of Good Hope. (Coll. F. Smith.)

59. Megachile apiformis, n. s.

Female. Length 5 lines.— Head and thorax black, on the sides of the face, along the margins of the eyes, the pubescence is short and white, below the insertion of the antennæ are some

long ochraceous hairs, on the vertex the pubescence is fuscous; mandibles ferruginous at their apex. Thorax above clothed with obscure yellow pubescence, at the sides of the metathorax it is paler, and beneath cinereous; the legs ferruginous, their pubescence cinereous, that on the tarsi beneath is fulvous; wings subhyaline, faintly clouded at the apical margins. The basal segment of the abdomen rufo-testaceous, the apical margins of the other segments also rufo-testaceous, each one much more narrowly so towards the apex; the pollen-brush is very pale fulvous.

Hab. Cape of Good Hope. (Coll. F. Smith.)

60. MEGACHILE FRONTALIS, n. s.

Male. Length 3½ lines.—Black, the face densely clothed with silvery-white hair, on the vertex and disk of the thorax it is pale ochraceous, short and very sparing; on the sides of the thorax beneath, and on the legs and head beneath, it is white; wings hyaline, tegulæ and nervures rufo-testaceous; the extreme apex of the tibiæ and apical joints of the tarsi rufo-testaceous; the anterior tarsi simple, the coxæ unarmed. Abdomen short, obtuse at the apex, the apical segment vertical, concave, and covered with short white pubescence, its margin notched in the middle, on each side of which are four short teeth, the innermost being longest; the segments are depressed at their base and have white bands on their apical margins; beneath, the segments are similarly banded.

Hab. Cape of Good Hope. (Coll. F. Smith.)

61. MEGACHILE EURIMERA, n. s.

Female. Length 5½ lines.—Black, the face densely covered with pale shining hair, having a golden lustre in certain lights; the mandibles broad, stout and tridentate at their apex, roughly sculptured and ferruginous in the middle; the pubescence on the disk of the thorax is somewhat ochraceous, and cinereous at the sides; the legs rufo-piceous, the tarsi testaceous, the basal joint of the posterior pair flattened and broadly dilated, the pubescence on the legs is pale fulvous, and bright deep fulvous on the tarsi beneath; wings subhyaline, faintly clouded at their apex. Abdomen subconical, clothed with fulvous pubescence; the pollen-brush of a golden yellow, palest towards the base of the abdomen.

Obs. This species closely resembles *M. dorsata*, but in that insect the basal joint of the posterior tarsi is simple.

Hab. Cape of Good Hope. (Coll. F. Smith.)

62. MEGACHILE DORSATA, n. s.

Female. Length 7 lines.—Black, the pubescence on each side of the face is white, between and above the antennæ it is ochraceous, and on the margin of the clypeus ferruginous, the mandibles and labrum are ciliated with hairs of the same colour. Thorax clothed above with pale fulvous pubescence, beneath it is nearly white; on the tarsi and posterior tibiæ it is fulvous, and much paler on the other parts of the legs, all the tarsi ferruginous; wings subhyaline, the tegulæ testaceous, the nervures ferruginous; the apical margins have a slight cloud. Abdomen covered with fulvous pubescence, which is bright towards the base, becoming much paler towards the apex; the apical segment has a scattered black pubescence; the pollen-brush is fulvous.

Hab. Cape of Good Hope. (Coll. F. Smith.)

63. MEGACHILE PENNATA, n. s.

Male. Length 5½ lines.—Black, the face, the thorax posteriorly and the basal segment of the abdomen covered with white pubescence; that on the thorax anteriorly is black; the basal half of the wings hyaline, the apical half dark fuscous; the apical margins of the segments depressed, the fifth and sixth segments thinly covered with stiff black hairs, the margin of the latter notched in the middle.

Obs. This insect exactly corresponds with the *M. maxillosa*, Guér., in colouring, which is from Senegal; the difference in size and of locality appear to indicate a distinct species.

Hab. Cape of Good Hope. (Coll. F. Smith.)

64. MEGACHILE IANTHOPTERA, n. s.

Female. Length 7 lines.—Black, the face covered with silvery-white pubescence, leaving the clypeus which is coarsely punctured, naked; mandibles very stout, armed with four blunt teeth, covered towards their base with white pubescence, the cheeks covered with white pubescence. Thorax closely punctured, at the sides of the metathorax and beneath the wings a patch of long white pubescence, on the disk it is short and sparing, and posteriorly and on the scutellum it is black; anterior wings deep violet, the posterior pair subhyaline; legs clothed with short black pubescence, the anterior femora covered with long white pubescence, on the posterior tarsi within it is fuscous. Abdomen nigro-æneous, elongate and somewhat pointed at the apex; on each side are six patches of white pubescence, those on the second, third and fourth segments are pointed within;

the segments have a transverse depression and are covered with deep but scattered punctures; the pollen-brush on the abdomen beneath is entirely black.

Male. Length 6 lines.—Closely resembles the female, the pubescence is longer and the tarsi beneath are covered with fulvous pubescence, the claws ferruginous; the basal joint of the anterior tarsi simple; the apical segment of the abdomen vertical, down the centre of which is an elevated carina; the margin deeply notched in the middle, and on each side two smaller notches.

Obs. This species resembles *M. angularis*, but is very distinct; the wings are entirely purple, and the pollen-brush is entirely black; it is altogether a larger and more conspicuous insect.

Hab. Cape of Good Hope. (Coll. F. Smith.)

65. Megachile cognata.

Female. Length 7½ lines.—Head, thorax and legs black, and clothed with black pubescence; abdomen entirely clothed with rufo-fulvous pubescence; wings dark fuscous, darkest towards their apical margins. Head, the clypeus convex, and having at the sides some long, rigid, dark brown pubescence, its margin rounded; mandibles very stout, coarsely sculptured longitudinally, having a short groove towards their apex, which is armed with two obtuse teeth. Thorax, the calcaria, as well as the femora beneath, ferruginous.

Obs. This species closely resembles *M. mystacea* and *rufiventris*, but is quite distinct from both; the difference in the form of the face distinguishes it from *rufiventris*, whilst its size, coloration of the wings and calcaria will separate it from *M. mystacea*, in addition to which the pubescence of the abdomen is much longer.

Hab. Cape of Good Hope. (Coll. F. Smith.)

66. Megachile fulva, n. s.

Female. Length 7 lines.—Black, the pubescence of this species is entirely bright fulvous, the margin of the clypeus rounded, the mandibles longitudinally sculptured, and having a single tooth at their apex; the wings fulvo-hyaline, becoming fuscous towards their apex; the tegulæ and nervures fulvo-testaceous towards the base of the wings, towards their apex they are fuscous; legs rufo-fulvous; the pubescence of the abdomen entirely fulvous, having a marginal fascia of the same colour.

Hab. Africa. (Coll. F. Smith.)

67. Megachile flavipennis. B.M.

Female. Length 7 lines. — Black, head and thorax very closely punctured, the puncturing strongest on the thorax and running into each other, forming on the anterior portion irregular transverse rugose striation; the face above the clypeus as high as the anterior stemma clothed with a short black pubescence; the clypeus rugose, mandibles very stout, covered with elongate punctures, quadridentate. Thorax, the disk thinly covered with short fulvous pubescence, on the sides of the metathorax it is longer, more dense, and of a paler colour; wings yellow, their apical margins fuscous, the nervures and outer margin of the tegulæ rufo-testaceous; legs ferruginous. Abdomen thinly clothed with rufo-fulvous pubescence, that on the basal segment being pale fulvous, particularly at the sides; the margins of the segments have a fascia of rufo-fulvous pubescence, beneath at the base clothed with fulvous and at the apex with ferruginous pubescence.

Male.—This sex only differs from the female in having some pale pubescence, the anterior margin of the clypeus being bearded with pale yellow pubescence; the antennæ are attenuated towards their apex, the apical joint compressed.

Hab. Africa.

68. Megachile Æthiops, n. s. B.M.

Female. Length 7 lines.—Black, the head and thorax closely and strongly punctured, the clypeus produced, its anterior margin waved, the mandibles very stout at their base and acute at their apex, not toothed; on the cheeks at the base of the mandibles is a short obtuse spine. Thorax nearly naked, a little sooty-black pubescence at the sides of the metathorax; wings very dark fuscous, palest at their apical margins, and having a violet iridescence; legs black, the anterior and intermediate tibiæ have a short, acute, stout spine at their apex, above which as well as the claws are ferruginous. Abdomen short, very convex above, the pubescence black, very sparing above; closely punctured, and towards the apex having some larger punctures intermixed; the apical segment beneath smooth and shining, the sides broadly grooved, the groove roughened and pubescent.

Hab. Africa.

69. Megachile mystacea. B.M.

Apis mystacea, *Fabr. Syst. Ent.* p. 385. 41; *Ent. Syst.* ii. 336. 97, ♀ (*Cab. Banks Mus. Linn. Soc.*).

Anthophora mystacea, *Fabr. Syst. Piez.* p. 377. 24.

Obs. Four species are contained in the collection of the British

Museum, to all of which the brief description of Fabricius would equally apply; in order to distinguish the differences, the following additional particulars will be necessary.

M. mystacea.—Head, thorax, legs and basal segment of the abdomen black, the latter having on its apical margin a band of fulvous pubescence, with which the rest of the abdomen is covered; above the insertion of the antennæ, as high as the anterior stemma, the face is covered with griseous pubescence; below the antennæ on each side is a little black pubescence; the clypeus is rounded in front and has a slight notch in the centre; the mandibles are flat exteriorly and longitudinally grooved towards their apex, and covered with elongate punctures, armed at the apex with two teeth; the spines at the apex of the posterior tibiæ black.

The male is coloured as in the other sex, but the face has a tuft of white pubescence between the antennæ, the anterior margin of the clypeus has a long beard of the same colour; the legs are clothed above with black pubescence.

Hab. New Holland; Cape Upstart; Port Essington.

70. MEGACHILE ERYTHROPYGA, n. s. B.M.

Female. Length 4½ lines.—Black, the face clothed with fulvous pubescence; the thorax covered with a griseous pubescence, very sparing on the disk, where it is somewhat fuscous on and towards the scutellum; wings fusco-hyaline, nervures black; the tarsi fulvous beneath, the claws rufo-testaceous. Abdomen very convex above, the three basal segments have on each side a short white marginal fringe; the fifth and sixth segments red, except the extreme base and sides of the former, and clothed with bright fulvous pubescence; the pollen-brush very pale yellow, the extreme apex fuscous.

Male. Length 4–4½ lines.—Resembling the female in general appearance, the pubescence similar; the abdomen has only a short fringe on the second segment, the fifth segment is covered with bright fulvous-red pubescence, except a narrow portion at the sides, the sixth segment black, depressed and notched at the apex; the anterior tarsi are simple, the coxæ unarmed.

Obs. The sexes are united from the circumstance of their having been sent together, and the great general resemblance of the insects.

Hab. Western Australia. (The female in the Coll. of W. W. Saunders, Esq.)

71. Megachile punctata, n. s.

Male. Length 4 lines.—Black, the face covered with pale yellow pubescence, brightest on the clypeus; the cheeks, thorax and femora beneath covered with long cinereous pubescence; on the disk of the thorax it is very sparing and slightly ochraceous; the wings fuscous, hyaline towards their base. Abdomen naked, strongly punctured, and having on each side of the basal segment a spot of snow-white pubescence; the apical segment notched in the middle.

Hab. New Holland. (Coll. J. S. Baly, Esq.)

72. Megachile aurifrons, n. s. B.M.

Female. Length 5½ lines.—Black, the face thickly covered with bright fulvous pubescence, leaving the anterior part of the clypeus naked, on each side of which touching the eyes is a patch of white pubescence; the clypeus in the centre, produced into a somewhat quadrate lobe, which is widest at the base, and its anterior margin slightly emarginate; the lobe has several depressions above, and at its sides is deeply concave; antennæ bright ferruginous at their base, becoming gradually darker to their apex; the cheeks and sides of the thorax have a hoary pubescence; the wings hyaline at their base, and slightly clouded towards their apical margins; the legs covered with short hoary pubescence, that on the tarsi beneath reddish brown; claws ferruginous, their tips black. The abdomen covered at its base with hoary pubescence; beneath densely clothed with pale pubescence, which in certain lights has a silvery brightness.

Hab. New Holland.

73. Megachile lucidiventris, n. s. B.M.

Female. Length 6 lines.—Black, on each side of the face and at the insertion of the antennæ a little white pubescence, on the clypeus it is fuscous; the margin of the clypeus ciliated with ferruginous hairs; the cheeks coarsely punctured, and having as well as the thorax beneath and the legs a griseous pubescence; the metathorax covered with pale ochraceous pubescence, as well as the basal segment of the abdomen and basal margin of the second; wings subfuscous, palest at their base; the posterior femora and tibiæ within covered with very short silvery-white pubescence, the tarsi beneath reddish-brown, the calcariæ and claws ferruginous. Abdomen, excepting at the base, covered above with short black pubescence; beneath, the pollen-brush is of a glittering whiteness.

Hab. New Holland.

74. MEGACHILE IGNITA, n. s. B.M.

Male. Length 5 lines.—Black, the head a little wider than the thorax, subquadrate, the face covered with fulvous pubescence, the cheeks have a thick fringe of the same colour, but much paler; on the thorax beneath and on the sides, also on the legs, the pubescence is pale bright yellow; wings pale fuscous; the anterior coxæ unarmed, the tarsi simple, the apical joints pale testaceous; the anterior and intermediate tarsi behind and the posterior pair in front are fringed with long white pubescence. Abdomen, the base thinly covered with white pubescence, the two apical segments bright red, the apical segment having a deep depression in the middle, its margin deeply notched, angles of the notch rounded.

Hab. New Holland.

75. MEGACHILE ABDOMINALIS, n. s. B.M.

Male. Length 3 lines.—Black, head wider than the thorax, the antennæ as long as the head and thorax, the face covered with white pubescence; the cheeks, thorax beneath and legs thinly covered with white pubescence, the tarsi rufo-testaceous; the wings hyaline and iridescent, the anterior tarsi and coxæ simple; the abdomen red, closely punctured, the apical segment entire.

Hab. New Holland.

76. MEGACHILE SIMPLEX, n. s. B.M.

Female. Length 4 lines,—Black, the face has a little snow-white pubescence on each side; between and above the antennæ it is of a dirty white; the clypeus closely and deeply punctured; the cheeks roughly punctured and having a thin griseous pubescence. Thorax, the sides thinly covered with griseous pubescence, on the disk it is somewhat fuscous; wings subhyaline, faintly clouded at their apical margins; legs beneath dark rufo-testaceous, the tarsi have a reddish-brown pubescence beneath; the claws rufo-testaceous, their tips black. Abdomen pointed at the apex, the segments above have a narrow white marginal fringe; beneath, the pollen-brush is of a glittering whiteness.

Hab. New Holland. (From Hunter's Coll.)

77. MEGACHILE LATIPES, n. s.

Male. Length 5 lines.—Black, the face covered with golden-yellow pubescence, the antennæ ferruginous beneath; the cheeks, legs and thorax beneath thinly covered with long white pubescence; the anterior coxæ armed with two long obtuse spines;

the anterior tarsi very pale testaceous, the three basal joints broadly dilated, and having behind a pale thick fringe, which is fulvous beneath; the intermediate tarsi are also covered above with long white pubescence; the joints of the posterior tarsi are very pale testaceous, and fuscous at their apex; the claws ferruginous, their tips black; wings subfuscous, palest towards their base; the metathorax and first segment of the abdomen covered with white pubescence, on the other segments it is short and black; the apex obtuse; the apical margin of the sixth segment emarginate.

Hab. New Holland. (Coll. J. S. Baly, Esq.)

78. MEGACHILE OBTUSA, n. s.

Male. Length $3\frac{1}{4}$ lines.—Black, the head large, wider than the thorax; the face covered with bright yellow pubescence; the antennæ rufo-testaceous beneath; the cheeks, legs and thorax beneath covered with long white pubescence; on the disk and on the sides of the metathorax it is pale yellow; wings hyaline and iridescent, faintly clouded at their apical margins, the nervures black; the anterior tarsi pale yellow testaceous, the basal joint slightly dilated, and of the same width throughout; the posterior margin thinly fringed with white pubescence, as are also the intermediate tarsi behind; all the tarsi beneath have a bright yellow pubescence, the calcaria pale testaceous; claws rufo-testaceous, black at their tips. Abdomen short, all the segments have a pale marginal fringe; the apical segment covered with bright yellow pubescence, its apex bidentate; the lateral angles acute.

Hab. Western Australia. (Coll. W. W. Saunders, Esq.)

79. MEGACHILE CLYPEATA, n. s.

Female. Length 3 lines.—Black, closely and strongly punctured, head subquadrate, on each side of the face a little griseous pubescence, the anterior margin of the clypeus has on each side a broad flattened tooth. Thorax, a little griseous pubescence on the sides; the wings hyaline and iridescent, the claws rufo-testaceous. Abdomen, the basal margins of the segments depressed, the apical margins on each side have a narrow white fringe, the apical segment ferruginous; beneath, the pollen-brush white.

Hab. Western Australia. (Coll. W. W. Saunders, Esq.)

80. MEGACHILE MACULATA, n. s. B.M.

Female. Length 5 lines.—Black, the face thickly covered with very pale ochraceous pubescence, nearly white at the mar-

gins of the eyes; the flagellum rufo-testaceous beneath; the cheeks, thorax beneath and the legs covered with glittering white pubescence; the vertex and disk of the thorax thinly covered with ochraceous pubescence, intermixed with a few black hairs; a small tuft of white pubescence beneath the tegulæ, an ochraceous one above it, and two others touching the anterior margin of the scutellum; a line of pale pubescence along its inferior margin; the metathorax thinly covered with long white hairs; the wings hyaline, very faintly clouded at their apical margins. Abdomen broad at the base and acute at the apex; the margins of the segments having a narrow band of ochraceous pubescence; beneath, the pollen-brush is of a pale glittering brightness.

Male. Length 4½ lines.—This sex resembles the female in having the thorax similarly spotted with tufts of pale pubescence; that on the face is golden-yellow; the anterior femora and tibiæ in front and beneath and the intermediate tibiæ in front rufo-testaceous; the anterior tarsi very pale testaceous, nearly white, and having on their anterior margin a narrow fringe of ferruginous pubescence and a white fringe on the posterior one, the outer edge being narrowly fulvous; the intermediate tarsi have a long fringe of white hair; all the claws ferruginous, their tips black. The two apical segments of the abdomen covered with a short bright yellow pubescence intermixed with long black hairs; the apical segment bidentate; beneath, the segments have narrow white marginal fasciæ.

Hab. Western Australia.

81. Megachile canifrons, n. s. B.M.

Male. Length 3½ lines.—Black, the face clothed with long white pubescence, that on the clypeus silvery; the cheeks, sides of the thorax, the basal segment of the abdomen and sides of the second covered with white pubescence; the femora have a long fringe, and the tibiæ and tarsi a thin clothing of the same colour; the tarsi beneath pale fulvous; the claws testaceous, their tips black; the wings hyaline, iridescent, and faintly clouded at their apical margins, nervures black. Abdomen short, rather narrowed at the base, the apical margins of the first and second segments have laterally a short fringe of snow-white pubescence; the three apical segments curving downwards; the fifth segment has a large patch of bright fulvous pubescence; the margin of the sixth segment entire.

Hab. Western Australia.

82. Megachile apicata, n. s.

Female. Length 3 lines.—Black and strongly punctured, on each side of the face a little white pubescence, on the anterior margin of the clypeus are three short teeth, mandibles coarsely sculptured and longitudinally grooved. Thorax, on the sides, beneath, and also on the legs a thinly scattered griseous pubescence; the claws ferruginous; wings hyaline and iridescent, the nervures dark brown; the basal margins of the segments depressed and having a band of white pubescence; the sides of the sixth segment broadly ferruginous; beneath it is entirely so, the pollen-brush griseous.

Hab. Adelaide. (Coll. F. Smith.)

83. Megachile Heriadiformis, n. s.

Female. Length 5 lines.—Black, elongate and closely punctured; the face has a little white pubescence on each side; on the anterior margin of the clypeus are two minute tubercles; the labrum elongate, concave towards the apex, which is rounded and is produced into a sharp angle or tooth on each side; the mandibles obliquely truncate at their apex. Thorax, on the sides and beneath a thinly scattered white pubescence; the tarsi pale fulvous beneath, the apical joints of the tarsi and the calcaria ferruginous; wings subhyaline, faintly clouded at their apical margins, the nervures dark ferruginous. Abdomen slightly narrowed at the base, on each side of the three basal segments is a short fascia of white pubescence, those on the two latter are tinged with yellow at their inner extremities, on the margin of the fourth is a narrow fascia, a broad one on the fifth, and the sixth is covered, except at its extreme base, with pubescence of a golden-yellow colour; the pollen-brush is white.

Hab. Adelaide. (Coll. F. Smith.)

84. Megachile semi-luctuosa, n. s. B.M.

Female. Length 7 lines.—Black, on each side of the face a patch of white pubescence, the clypeus slightly produced in the middle of its anterior margin, which, near the base of the mandibles, has a short tooth. Thorax above thinly clothed anteriorly with black pubescence, posteriorly on the sides and beneath with white; the legs have a similar pubescence, except that on the tarsi beneath, which is of a reddish-brown; the wings subhyaline, and having a fuscous cloud on their apical margins. Abdomen elongate, the two basal segments covered with white pubescence, a minute spot of the same colour on the apical margin of the

third segment on each side; the pollen-brush is of a very pale yellow.

Male.—In general appearance closely resembling the female; the clypeus is bearded with brilliant silvery-white pubescence, the antennæ capitate, the apical joint being compressed, the anterior femora in front, all the tibiæ in front, and the anterior tarsi rufo-testaceous, the latter being very pale, broadly dilated, and fringed with long pubescence, which is fulvous at its exterior margin; in the hollow of the dilated tarsus are two black dots; the anterior coxæ are armed with two long obtuse spines, which, at their base in front, have another short acute spine which curves backwards; the intermediate and posterior tarsi fringed beneath with long pale hairs. Abdomen obtuse at the apex, the apical segment having a broad depression or concavity, its margin being simply emarginate and without teeth; beneath, the margins of the segments testaceous.

Hab. South Australia; Adelaide. (The male in the Coll. of W. W. Saunders, Esq.)

85. MEGACHILE LEUCOPYGA, n. s. B.M.

Female. Length 4½–5 lines.—Black, the face thinly covered with griseous pubescence; on the vertex and disk of the thorax it is fuscous; the mandibles stout, obliquely truncate and bidentate at their apex; the cheeks, thorax on the sides and beneath, as well as the legs, thinly clothed with griseous pubescence; the wings fusco-hyaline, their nervures black; the claws and calcaria rufo-testaceous, the tarsi fulvous beneath. Abdomen elongate, at the sides of the basal segment a little white pubescence, on each side of the second and third segments a short fringe of snow-white pubescence; at the apex is an ovate patch of pale pubescence, slightly tinged with yellow, which extends to about the middle of the fifth segment; the pollen-brush very pale yellow, or nearly white.

Hab. Van Diemen's Land.

86. MEGACHILE CHRYSOPYGA, n. s. B.M.

Female. Length 5–6 lines.—Black, the face as high as the anterior stemma clothed with fulvous pubescence; on the cheeks, sides of the thorax and beneath is a thin clothing of white pubescence; the tarsi are fulvous beneath, the anterior and intermediate pairs have a pale yellow pubescence above, the basal joint of the posterior tarsi flattened and broadly dilated; the entire legs are roughly punctured, and covered otherwise with a griseous pubescence; wings subhyaline, the nervures dark ferruginous. Abdomen short and broad, the segments having each

a deep transverse impressed line, the base covered with a thin griseous pubescence; the lateral margins have a short fringe of the same colour, more or less continuous, rarely entire, excepting on the fourth or fifth segments; on the sixth segment, and sometimes extending over a portion of the fifth, is a patch of fulvous pubescence; the pollen-brush is very pale yellow.

Male. Length 4–4½ lines.—In general aspect resembling the female, the mandibles very broad at their base, tridentate at their apex; the anterior legs have their femora concave beneath, are of a pale rufo-testaceous colour, and obliquely striped at their base with black lines; the tibiæ and tarsi pale rufo-testaceous, having a dark stain behind and at their base; the two basal joints of the tarsi dilated, the second is produced at its apex above into a rounded lobe, the inferior margin has a thick fringe of white pubescence, which is stained with yellow at the edge; the dilated joints beneath have two black dots; the coxæ armed with obtuse spines. The apical segment of the abdomen tridentate, the centre tooth very short.

Hab. Van Diemen's Land; Western Australia.

87. Megachile ordinaria.

Female. Length 4 lines.—Black, the face on each side has a little white pubescence, the margin of the clypeus slightly emarginate, the mandibles covered with coarse longitudinal punctures; the cheeks fringed with long white pubescence. The thorax on the sides and beneath as well as the legs have a thin long white pubescence; the tarsi beneath fulvous; the claw-joint ferruginous; the wings hyaline and iridescent, the nervures ferruginous. The apical margins of the segments of the abdomen have a narrow white fascia, more or less obliterated on the basal segments, the basal margins depressed, the apical segment covered with a short griseous pubescence; the pollen-brush beneath the abdomen is of the same colour.

Hab. Van Diemen's Land. (Coll. F. Smith.)

88. Megachile dimidiata, n. s. B.M.

Female. Length 6 lines.—Black, the head densely clothed with bright fulvous pubescence, the clypeus and the space between the stemmata naked, antennæ ferruginous. Thorax entirely clothed, as well as the legs and basal segment of the abdomen, with bright fulvous pubescence; wings fulvo-hyaline, the tegulæ and nervures rufo-testaceous. Abdomen, excepting the basal segment, covered above with very short and beneath with long black pubescence.

Hab. India.

89. MEGACHILE ANTHRACINA, n. s. B.M.

Female. Length 7–8½ lines.—Black, the face above the clypeus as high as the anterior stemma thickly clothed with short black pubescence, the anterior margin slightly produced in the middle; the mandibles stout, having above some longitudinal punctures, and two grooves towards their apex, which is armed with two sharp teeth. Thorax above naked, shining and strongly punctured; each side of the metathorax thickly covered with sooty-black pubescence; wings dark fuscous, having a brilliant violaceous iridescence. Abdomen shining above, and having more or less of a changeable blue tinge; beneath, the pollen-brush is blackish-brown.

Hab. India.

90. MEGACHILE CONJUNCTA, n. s. B.M.

Female. Length 5 lines.—Black, the face clothed with black pubescence, at the lateral margins of the clypeus and on the mandibles a little cinereous pubescence; the metathorax and basal segment of the abdomen clothed above with yellowish white pubescence, on the disk of the thorax anteriorly it is sooty-black; wings broadly fuscous towards their apex, the base hyaline; all the tarsi beneath are fulvous, on the intermediate pair above the pubescence is fulvous; the posterior legs have a cinereous pubescence, and the basal joint of the posterior tarsi is dilated; the calcaria pale testaceous. The abdomen above has a metallic hue, and has a little black pubescence along its lateral margins; beneath, the pollen-brush is bright fulvous.

Male.—This sex bears a strong resemblance to the female, but is rather smaller; the face covered with white pubescence, the middle of the clypeus being naked, the anterior tarsi simple and the coxæ unarmed; the claws ferruginous, the calcaria black; the apical segment of the abdomen entire, having a deep depression in the centre.

Hab. India; Bengal. (The male in the Coll. of W. W. Saunders, Esq.)

91. MEGACHILE UMBRIPENNIS, n. s. B.M.

Female. Length 5 lines.—Black, the face has a thin clothing of black pubescence, between the insertion of the antennæ and the anterior stemma it is slightly fulvous; mandibles porrect, deeply grooved and sculptured longitudinally, and armed with four stout teeth, the two apical ones acute; the cheeks and thorax beneath have a thin short cinereous pubescence; the thorax

above and basal segment of the abdomen densely covered with a short rich fulvous pubescence; the wings reddish brown with a purple or coppery iridescence, the externo- and interno-medial cells hyaline, the posterior wings also hyaline at their base, nervures ferruginous, the second and third segments of the abdomen having a narrow fulvous marginal fringe, usually much obliterated, particularly on the third segment; the fourth and fifth segments on each side have a short white marginal fringe; beneath, the pollen-brush is yellowish white, but black on the two apical segments.

Hab. Nepaul. (Coll. Major Hardwick.)

92. MEGACHILE FULVO-VESTITA, n. s.

Female. Length 6½ lines.—Black, densely clothed above with fulvous pubescence, that on the face is the longest; wings subhyaline, faintly clouded at their apical margins; the legs above have a pale fulvous pubescence; the tarsi beneath fulvous, the basal joint of the posterior tarsi broadly dilated; the calcaria and claws testaceous, the pollen-brush white.

Male.—Like the female; its pubescence above entirely fulvous, the anterior legs pale rufo-testaceous, their tarsi being palest; the basal joint at its apex anteriorly produced into an elongate process, which is rounded at the end; the second joint is of a similar form but much smaller, the whole fringed behind with white pubescence; the intermediate and posterior tarsi have a long loose fringe of pale pubescence; the basal joint of the posterior tarsi is broad and flattened, nearly square, and clothed beneath with fulvous pubescence; the calcaria and claws testaceous, the latter black at their tips; the apical segment naked, its margin crenulated.

Hab. Bombay. (Coll. F. Smith.)

93. MEGACHILE VESTITA, n. s.

Female. Length 6 lines.—Black, the face densely covered with bright yellow pubescence; the mandibles short, stout, longitudinally grooved, and armed with three blunt teeth, pubescent at their base and ciliated with bright yellow hairs; the cheeks thickly covered with pale ochraceous pubescence. Thorax, the disk thinly clothed with bright yellow pubescence, densely so on the sides, and beneath it is cinereous; the legs densely covered with pale yellow pubescence, on the tarsi beneath it is fulvous; the calcaria testaceous, claws ferruginous, their tips black; wings subhyaline. Abdomen short, broad and pointed at the apex; the base, sides and margins of the segments have

a pale yellow pubescence; beneath, the pollen-brush is pale yellow in the middle and bright fulvous at the sides.

Hab. India. (Coll. J. S. Baly, Esq.)

94. MEGACHILE RUFIPES, n. s.

Male. Length 5 lines.—Black, the face covered with a yellowish white pubescence, becoming fulvous at the insertion of the antennæ; mandibles ferruginous at their apex. Thorax very thinly clothed above with fulvous pubescence, on the sides and beneath it is cinereous; the legs red, the anterior pair have a tooth on their coxæ, and their tarsi dilated, the basal joint becoming gradually broader from the base to the apex; the second and following joints very slightly dilated; the wings fulvo-hyaline, their apical margins slightly fuscous, the nervures pale ferruginous; towards the apex of the wing they become black. Abdomen, the apical margins of the segments ferruginous, narrowly fringed with fulvous pubescence, the apical segment ferruginous and deeply depressed at the apex, the two apical segments covered with short fulvous pubescence; beneath, the margins of the segments pale ferruginous, the apical segments have a short, thin, white pubescence.

Hab. East Indies. (Coll. F. Smith.)

95. MEGACHILE IMITATRIX, n. s.

Female. Length 8 lines.—The face, vertex and metathorax clothed with fulvous pubescence, a fringe of the same colour on the anterior femora beneath, that on the cheeks is paler; the thorax beneath, its sides, and also the metathorax and legs, black; the abdomen entirely black, pubescent above, very densely so beneath.

Hab. India? (Coll. W. H. L. Walcott, Esq.)

96. MEGACHILE GRANDIS. B.M.

Megachile grandis, *St. Farg. Hym.* ii. 333. 6.

Hab. ——?

97. MEGACHILE LANATA. B.M.

Apis lanata, *Fabr. Ent. Syst.* ii. 335. 90.
Anthophora lanata, *Fabr. Syst. Piez.* p. 372. 1.
Megachile lanata, *St. Farg. Hym.* ii. 342. 15.

Hab. India.

Obs. Fabricius has given for the habitat of this species South America; one of the most common species from India in every

particular agrees with his description, which is not the case with any species yet received from South America; it is most probable that the locality indicated is erroneous.

98. MEGACHILE DISJUNCTA. B.M.

Apis disjuncta, *Fabr. Ent. Syst.* ii. 328. 62.
Anthophora disjuncta, *Fabr. Syst. Piez.* p. 374. 10.
Megachile disjuncta, *St. Farg. Hym.* ii. 331. 3.
Hab. India; Isle of France.

99. MEGACHILE RUFIVENTRIS. B.M.

Megachile rufiventris, *Guér. Voy. Ind. Orient.* (*Belang.*) p. 502. t. 4. f. 5?

Obs. This species very closely resembles the *M. mystacea*; in the Museum Collection are examples from India and the Isle of France: in all probability this is the insect described by M. Guérin: the following differences distinguish it from *M. mystacea*.

The abdomen entirely fulvous-red, the basal segment having no black pubescence on its superior surface; the pubescence of the head is entirely black; the face a little before the insertion of the antennæ is obliquely truncated and roughened by irregular sculpture; the anterior margin of the clypeus is transverse, and on each side is slightly produced before reaching the base of the mandibles; the mandibles are rounded exteriorly and have no grooves towards the base, but have two short ones at their apex; the spines at the apex of the posterior tibiæ red.

Male.—In colour agreeing with the female; the clypeus is convex in this sex and has a thick fringe of white pubescence on its anterior margin, a tuft of the same colour between the antennæ, and a line on each side along the margin of the eyes; between these it is black; the calcaria as in the female are red.
Hab. India; Isle of France.

100. MEGACHILE FRATERNA, n. s. B.M.

Female. Length 7½ lines.—Black, the face as high as the insertion of the antennæ covered with black pubescence, leaving the basal portion of the clypeus naked; mandibles broad at their apex and armed with three teeth. The pubescence on the thorax and legs black; on the posterior tarsi it is fulvous, as also on the femora and tibiæ within, but on the latter it is paler; the wings subhyaline, their apical margins having a fuscous cloud. Abdo-

men densely clothed above with short deep fulvous pubescence; beneath, the pollen-brush is of a golden-yellow.

Obs. This species bears a close resemblance to the *M. rufiventris* of Guérin, but independent of its larger size is distinguished by the colour of its wings and posterior legs.

Hab. India.

101. MEGACHILE MONTICOLA, n. s. B.M.

Female. Length 9 lines.—Black, the face thickly covered with short black pubescence, the base of the clypeus produced in the middle, and on each side having also a small shining tubercle; below, the produced portion of the clypeus is deeply concave, its anterior margin transverse; mandibles porrect, tridentate at their apex. Thorax, the disk, metathorax and basal segment of the abdomen above densely covered with rich fulvous pubescence; wings subhyaline, their apical margins having a fuscous cloud, yellowish towards the base, the nervures ferruginous; the legs and apical segments of the abdomen covered with black pubescence, on the latter it is very short and sparing: the pollen-brush black.

Hab. Silhet; Northern China. (Coll. R. Fortune.)

102. MEGACHILE CARBONARIA, n. s.

Male. Length 5½ lines.—Black and shining, the abdomen having in some lights a purple metallic iridescence; the face below the insertion of the antennæ densely covered with bright golden pubescence; wings purple-black, sides of the metathorax covered with black pubescence; disk of the thorax and the abdomen above naked, the apical segment has its margin notched in the middle.

Hab. Northern India. (Coll. W. W. Saunders, Esq.)

103. MEGACHILE CEPHALOTES, n. s. B.M.

Female. Length 4½–5 lines.—Black, head subquadrate, rugose; the vertex as well as the disk of the thorax is roughly sculptured transversely; on each side of the face a little white pubescence; the sides of the metathorax covered with white pubescence; wings subfuscous, hyaline towards their base; the legs above have a short white pubescence. Abdomen slightly metallic, the basal margins of the segments much depressed and having bands of white pubescence more or less interrupted, those on the apical segments usually obliterated; the sides of the basal segment have a square white patch; beneath, the pollen-brush is white.

Male.—Closely resembling the female, the coxæ armed with short teeth, the anterior tarsi simple, rufo-testaceous; the margin of the apical segment of the abdomen notched in the middle.

Hab. Northern India.

104. MEGACHILE ALBIFRONS, n. s. B.M.

Female. Length 6 lines.—Black, the face densely covered with white pubescence, the cheeks thinly covered with the same. Thorax, the sides covered with white pubescence, the apical half of the wings dark fuscous, the basal half subhyaline; the anterior legs have a fuscous pubescence intermixed with a few white hairs; the intermediate and posterior legs have a thin white pubescence, the tarsi beneath fuscous, the claws ferruginous, their tips black. Abdomen slightly metallic, on each side of the basal segment is a square patch of white pubescence, and the following segments have on each side an oblong patch pointed within; sometimes the bands are continuous on the fourth and fifth segments; the pollen-brush is snow-white.

Male. — Closely resembling the female; the anterior tarsi simple, rufo-testaceous; the coxæ armed with short obtuse teeth; all the tarsi have a loose fringe of pale pubescence, the claws ferruginous, their tips black; the tarsi pale fulvous beneath. Abdomen elongate and slightly metallic, the segments banded with white pubescence, on the third, fourth and fifth continued beneath the abdomen; the apical segment vertical, having an elevated carina in the middle, its margin rounded and furnished with six or eight obtuse teeth.

Hab. Northern India.

105. MEGACHILE VELUTINA, n. s.

Female. Length 8 lines.— Black, the face, thorax, legs and two basal segments of the abdomen densely clothed with short bright fulvous-red pubescence; the base of the clypeus marginate and having a raised carina down the centre; the wings subhyaline, yellowish, and faintly clouded at their apical margins; the tegulæ and nervures pale rufo-testaceous; the four apical segments of the abdomen black; on the abdomen beneath, the pollen-brush is fulvous in the middle and black at the sides.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

106. MEGACHILE FASCICULATA, n. s.

Male. Length 6½ lines. — Black, the face densely covered with a golden-yellow pubescence; on the cheeks and mandibles

it is very dense and ochraceous. Thorax, the anterior femora and tibiæ pale rufo-testaceous, the femora behind and tibiæ above fuscous, the coxæ armed with short sharp spines; the tarsi slightly dilated, fringed behind with short fuscous pubescence; the intermediate tarsi have a long dense floccus of black pubescence behind; on the tarsi above it is slightly fulvous; the posterior tarsi have a pale fringe beneath; the disk of the thorax is thinly covered with pale yellow pubescence, on the metathorax it is black; wings subhyaline, their apical margins fuscous. Abdomen above naked, the apical segment notched, its margin crenulated; beneath, the pubescence is pale yellow.

Hab. Northern India. (Coll. W. W. Saunders, Esq.)

107. Megachile bicolor. B.M.

Apis bicolor, *Fabr. Mantis.* i. 304. 66.
Apis albiventris, *Christ. Hym.* p. 171. t. 13. f. 9.
Apis bicolor, *Fabr. Ent. Syst.* ii. 335. 91.
Anthophora bicolor, *Fabr. Syst. Piez.* p. 373. 3.
Megachile bicolor, *St. Farg. Hym.* ii. 342. 15.

Hab. India; China.

108. Megachile sculpturalis, n. s. B.M.

Female. Length 9 lines.—Black, the face above the clypeus as high as the stemmata covered with black pubescence; the clypeus ruggedly sculptured, truncate in front; its anterior margin transverse, the mandibles stout and armed with two teeth, the apical one long and acute. The thorax, legs and basal segment of the abdomen covered with fulvous pubescence; wings fusco-hyaline, much clearer and yellowish towards the base, nervures ferruginous. Abdomen black, with a blue tinge, each segment having a transverse arched depression, the second and third segments covered with large deep punctures; beneath, the pollen-brush is fulvous towards the base, and red-brown towards the apex.

Hab. North China. (Coll. R. Fortune.)

109. Megachile fervida, n. s. B.M.

Female. Length 7½ lines.—Black, the pubescence on the clypeus fuscous, at the sides and above which as high as the anterior stemma it is pale fulvous; mandibles broad at their apex and armed with four stout teeth. Thorax, the sides covered with pale fulvous pubescence; wings fuscous, subhyaline at their base, nervures ferruginous; the pubescence on the anterior and intermediate legs is black, that on the intermediate tarsi

is fulvous; all the tarsi fulvous beneath, the posterior legs clothed with bright fulvous pubescence, as well as the abdomen above; the latter has a little of a much lighter colour on each side of the basal segment; beneath, the pollen-brush is of a golden-yellow.

Hab. Hong Kong.

110. MEGACHILE THORACICA, n. s.

Female. Length 5 lines.—Black, the pubescence on the face black, the cheeks coarsely punctured. Thorax coarsely rugose, the metathorax covered with snow-white pubescence, a tuft of the same colour on each side of the basal segment; wings dark fuscous, having a purple tinge, the extreme base hyaline; the abdomen above has a blue metallic tinge; beneath, the pollen-brush is of a yellowish white, on the two apical segments it is black.

Obs. The pubescence on the thorax beneath as well as that of the abdomen, under a moderate magnifying power, will be found to have each individual hair thickest at its apex.

Hab. Java. (Coll. F. Smith.)

111. MEGACHILE OPPOSITA.

Female. Length 6½ lines.—Black, the face, cheeks, and disk of the thorax covered with short bright fulvous pubescence; the anterior legs beneath have also a fulvous pubescence, above it is black; on the metathorax, thorax beneath, legs and abdomen it is black; the claws ferruginous, their tips black; wings dark fuscous, their apical margins palest.

Hab. Java. (Coll. W. W. Saunders, Esq.)

112. MEGACHILE ATRATA, n. s. B.M.

Female. Length 7–8 lines.—Entirely of a deep black, the mandibles porrect, very broad at their apex and armed with four teeth, when closed the teeth of each mandible fit into the spaces between the opposite ones; exteriorly the mandibles are somewhat rounded and project in a line with the face of the clypeus; the wings fusco-hyaline, and having a purple reflection, the nervures black; the pollen-brush beneath the abdomen has a slight reddish tinge in the middle.

Obs. The wings are sometimes yellow with a fuscous margin.

Hab. Philippine Islands.

113. Megachile laticeps, n. s. B.M.

Male. Length 4 lines.—Black, the head wider than the thorax, the face, sides of the thorax and the basal segment of the abdomen covered with a golden-yellow pubescence, the cheeks covered with long pale yellow pubescence; the wings subhyaline, faintly clouded at their apex; the anterior tarsi simple, the coxæ unarmed, the anterior and intermediate tarsi behind, and the posterior pair before, fringed with long pale pubescence; all the tarsi pale fulvous beneath. The apical margins of the segments of the abdomen have laterally a little pale pubescence, the apical segment notched in the middle.

Hab. Philippine Islands.

114. Megachile ornata, n. s.

Female. Length 8 lines.—Black, on each side of the face is a little black pubescence, and in front of the insertion of the antennæ an elevation extending to the base of the clypeus, which from thence descends obliquely to its anterior margin, which is transverse. Thorax, the sides have a little cinereous pubescence, the legs rugose above, and having a thinly scattered stiff black pubescence, the tarsi fulvous beneath; wings subhyaline, and having a fuscous cloud at their apical margins. The four basal segments of the abdomen have a black pubescence, the apical margin of the fourth has a narrow fulvous fascia, and the fifth segment is covered with pale yellow pubescence, the sixth having a few scattered pale hairs; on each side of the second segment is a small spot of fulvous pubescence; the pollen-brush bright fulvous-red.

Hab. ——? (Coll. J. S. Baly, Esq.)

115. Megachile flavitarsata, n. s.

Male. Length 5–6 lines.—Black, the face densely covered with pubescence of a bright golden-yellow colour; the flagellum fulvo-testaceous beneath; the anterior legs pale rufo-testaceous, the extreme apex of the femora and base of the tibiæ above fuscous, the tarsi pale yellow, broadly dilated, gradually decreasing in width from the base to the claw-joint; the tarsi have a thick fringe behind, which is bright yellow on the basal segment, and white on the following ones, its margin being yellow; the coxæ armed with stout teeth; the intermediate and posterior legs rufo-testaceous, their tarsi flavo-testaceous, fringed with long pale hairs and covered with bright golden-yellow pubescence. Abdomen, the two basal segments have a thin pale fulvous pubescence, on the following it is short and black; the apical margins of the segments have a narrow pale fascia; the apical mar-

gin shagreened and notched in the middle, and having in the centre a deep depression.
Hab. St. Vincent's. (Coll. F. Smith.)

116. Megachile luctifera.

Megachile luctifera, *Spin. Ann. Soc. Ent. Fr.* xi. 142. 92.
Hab. Cayenne.

117. Megachile nigripennis.

Megachile nigripennis, *Spin. Ann. Soc. Ent. Fr.* xi. 143. 93.
Hab. Cayenne.

118. Megachile conica.

Megachile conica, *Spin. Ann. Soc. Ent. Fr.* xi. 144. 94.
Hab. Cayenne.

119. Megachile Poeyi.

Megachile Poeyi, *Guér. Icon. R. Anim.* p. 450.
Hab. Cuba.

120. Megachile Saulcyi.

Megachile Saulcyi, *Guér. Icon. R. Anim.* p. 450.
Hab. Chili.

121. Megachile binotata.

Megachile binotata, *Guér. Icon. R. Anim.* p. 450.
Hab. Isle of St. Thomas. (Coll. F. Smith.)

122. Megachile hypocrita, n. s. B.M.

Female. Length 6 lines.—Black, the face closely punctured, the vertex smooth and shining, at the sides of the clypeus and at the insertion of the antennæ a little griseous pubescence; the mandibles broad at the apex, which is armed with two or three very short blunt teeth; on the sides of the thorax and on the legs the pubescence is fuscous; before and behind the tegulæ and on each side of the metathorax a little white pubescence; all the tarsi have dark rufo-fuscous pubescence beneath, above it is dense and dark fuscous, the basal joint of the posterior tarsi broadly dilated and subconcave above; the wings dark fuscous, the apical margins palest. Abdomen subtriangular, acute at the apex, and having a slight metallic hue; on each side

of the basal segment a tuft of white pubescence; beneath, the pollen-brush is yellowish white.

Obs. The unique specimen described is probably worn by exposure, the upper surface being nearly without pubescence, and the wings are worn at the edges; in general aspect it appears to belong to another genus, but is a true *Megachile*.

Hab. Para. (Coll. H. W. Bates, Esq.)

123. MEGACHILE XANTHURA.

Megachile xanthura, *Spin. Mem. Accad. Torino*, xiii. no. 67.

Hab. Para.

124. MEGACHILE SIMILLIMA, n. s. B.M.

Female. Length 3½–4 lines.—Black, on each side of the face a line of snow-white pubescence, the cheeks and sides of the thorax have a thin hoary pubescence; a line of short white pubescence in front of the tegulæ, sometimes traversing their margin and passing along the base of the scutellum, usually more or less interrupted; the wings subhyaline, their nervures black; legs sometimes dark rufo-testaceous, covered with a short cinereous pubescence. Abdomen short and nearly triangular, the apical margins having a narrow white marginal fascia; beneath, the pollen-brush is yellowish white.

Obs. This species very closely resembles the European species *M. argentata*.

Hab. Para. (Coll. H. W. Bates, Esq.)

125. MEGACHILE DENTICULATA. B.M.

Male. Length 4 lines.—Black, the face covered with white pubescence, the clypeus naked, the cheeks have a long beard of white pubescence; the sides of the thorax are clothed and the legs fringed with pubescence of the same colour; the tarsi elongate, the apical joints ferruginous, the calcaria testaceous; the wings fulvo-hyaline, the tegulæ and nervures rufo-testaceous. Abdomen flat, the segments banded with white pubescence; the apical segment clothed with similar pubescence, its margin irregularly denticulate; beneath, the marginal bands are continued on the second, third and fourth segments.

Hab. Brazil; Rio Tapajoz. (Coll. H. W. Bates, Esq.)

126. MEGACHILE EXALTATA. B.M.

Male. Length 3½ lines.—Black, head large, wider than the thorax, the face densely covered with bright pale yellow pubes-

cence, that on the cheeks is long, dense and white. Thorax strongly punctured; wings hyaline, a fuscous cloud occupies the marginal cell and traverses the apical margins; the tegulæ testaceous, the nervures ferruginous; legs red, the intermediate and posterior tarsi black, the claws red. Abdomen short and obtuse at the apex; on each side the margins have a short fringe of white pubescence, very narrow, but entire on the fifth; the apical margin entire, the third, fourth and fifth bands continued beneath.

Hab. Brazil; Rio Tapajoz. (Coll. H. W. Bates, Esq.)

127. MEGACHILE LÆTA. B.M.

Female. Length 6 lines.—Black, the face and the mandibles exteriorly covered with short pale ochraceous pubescence, that on the cheeks and thorax beneath is of the same colour; in front of the anterior stemma a tuft of black pubescence. Thorax, the disk delicately punctured, shining; the scutellum highly polished and somewhat elevated, the sides of the metathorax covered with golden-yellow pubescence; wings subhyaline; the legs red, the basal joint of the posterior tarsi broad and flat, equal in size to the posterior tibiæ. Abdomen short and broad; the basal segment covered with golden-yellow pubescence, and the margins of the segment having bands of the same colour; beneath, densely covered with bright fulvous pubescence.

Hab. Brazil; Rio Tapajoz. (Coll. H. W. Bates, Esq.)

128. MEGACHILE NUDIVENTRIS.

Female. Length 6–6½ lines.—Black, the face has a sparing short black pubescence, and a mixture of griseous hairs at the sides of the clypeus, in the middle of the anterior margin of the clypeus is a small notch, the antennæ beneath fulvous; the pubescence on the disk of the thorax anteriorly is black, posteriorly and at the sides of the metathorax it is griseous; the tarsi beneath covered with bright fulvous pubescence, the legs otherwise have a short scattered griseous pubescence, slightly fuscous on the anterior legs in front, the calcaria pale testaceous; the basal segment of the abdomen covered with griseous pubescence, beyond which it is naked and has an obscure metallic tinge; beneath, the pollen-brush is nearly white.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

129. MEGACHILE SUSURRANS.

Megachile susurrans, *Halid. Trans. Linn. Soc.* xvii. 320. 13.

Hab. St. Paul's, Brazil. (Coll. W. W. Saunders, Esq.)

130. MEGACHILE VILLOSA. B.M.

Apis villosa, *Fabr. Ent. Syst.* ii. 336. 94.
Hab. India?

131. MEGACHILE CURVIPES, n. s. B.M.

Male. Length 5½ lines.— Black, the face densely clothed with bright golden-yellow pubescence, at the base of the clypeus intermixed with black hairs; the flagellum fulvous beneath; the cheeks beneath have a marginal line of white pubescence. Thorax, the disk sparingly covered with short fulvous pubescence, at the sides of the metathorax it is cinereous; wings fulvo-hyaline, the tegulæ and nervures ferruginous; the anterior and intermediate legs rufo-testaceous, the anterior tarsi broadly dilated, the basal joint produced at the apex, forming a rounded lobe at the extremity; the whole tarsus having a thick fringe of white pubescence, fulvous at its margin, the coxæ armed with stout spines; the intermediate tarsi behind and posterior pair in front have a loose fringe of long white pubescence, the posterior femora have a short tooth about the middle beneath, the tibia being arcuate; the basal segment of the abdomen covered with fulvous pubescence, and the three following segments fringed with the same; the apical segment has a deep depression in the middle, its margin being notched.
Hab. Brazil. (Coll. W. W. Saunders, Esq.)

132. MEGACHILE RUBRICATA, n. s.

Female. Length 6 lines.—Black, the sides of the face below the insertion of the antennæ covered with griseous pubescence, above the antennæ as high as the anterior stemma it is fulvous, as well as on the margin of the vertex; the scape of the antennæ black, the flagellum red, dusky above. Thorax, the pubescence on the disk fulvous, palest on the sides and beneath; wings flavo-hyaline, tegulæ and nervures pale rufo-testaceous; the legs of the same colour; the coxæ, trochanters and base of the femora black, thinly covered with pale fulvous pubescence, the anterior and intermediate tarsi thickly covered above; the basal joint of the posterior tarsi broadly dilated. Abdomen, the sides of the basal segment and the margins of the segments fringed with pale fulvous pubescence; the pollen-brush nearly white, its apex black.
Hab. Brazil. (Coll. F. Smith.)

133. Megachile ruficornis, n. s.

Female. Length 6 lines.—Black, the antennæ and mandibles red, the latter dusky at their tips; the head and disk of the thorax covered with fulvous pubescence, at the sides and beneath it is cinereous; the legs rufo-testaceous; wings hyaline, yellowish at their anterior margins, tegulæ and nervures pale rufo-testaceous; all the apical margins of the abdominal segments have a narrow white fascia; beneath, the brush is very pale yellow, at its sides and at the apex intermixed with black hairs.

Hab. Brazil. (Coll. F. Smith.)

134. Megachile squalens.

Megachile squalens, *Halid. Trans. Linn. Soc.* xvii. 320. 15.

Hab. St. Paul's, Brazil. (Coll. W. W. Saunders, Esq.)

135. Megachile rufipennis.

Apis rufipennis, *Fabr. Ent. Syst.* ii. 335. 89?
Anthophora rufipennis, *Fabr. Syst. Piez.* p. 373. 2?
Megachile rufipennis, *St. Farg. Hym.* ii. 334. 7.

Hab. St. Croix; South America.

136. Megachile brevis. B.M.

Megachile brevis, *Say, Bost. Journ. Nat. Hist.* i. 407 (1837).

Hab. North America; Mount Pleasant, Ohio.

137. Megachile femorata, n. s. B.M.

Male. Length 6 lines.—Black, the face covered with long bright yellow pubescence, on the vertex it is ochraceous; antennæ subcapitate, the apical joint compressed; mandibles short, armed with three teeth at their apex, and with a stout tooth at their base beneath. Thorax, the disk covered with yellow pubescence, which in recent specimens is bright, but in most examples dull ochraceous; on the sides the pubescence is paler; wings hyaline, their apical margins faintly clouded; the anterior legs pale rufo-testaceous, their tarsi white, densely fringed with long white pubescence, the femora have a similar fringe at their base behind; the intermediate and posterior femora incrassate; the basal joint of the intermediate tarsi very much thickened, rounded, and polished behind; the intermediate and posterior tibiæ arcuate, the apical segment of the abdomen having a ragged notch in the middle, on each side of which the margin has several small incisions.

Hab. United States.

138. MEGACHILE MORIO, n. s. B.M.

Female. Length 6 lines.—Black, the pubescence entirely black, very dense on the face, sides of the metathorax, and basal segment of the abdomen; the following segments have a marginal fringe of the same colour; the wings fusco-hyaline, the anterior tibiæ punctured, not rugose.

Obs. This species very closely resembles *M. xylocopoides*, but appears on comparison to be distinct; from the latter it differs in having the vertex more deeply emarginate, the thorax more closely punctured, the scutellum nearly covered with pubescence and rounded behind, the anterior legs not rugose, and the abdomen much more pubescent.

Hab. United States. (Coll. E. Doubleday, Esq.)

139. MEGACHILE XYLOCOPOIDES, n. s. B.M.

Female. Length 6 lines.—Black, the pubescence entirely black, the clypeus, vertex, disk of the thorax, and abdomen above naked, except a little at the sides of the basal segment; the scutellum slightly produced and somewhat pointed in the middle of its posterior margin, and being, as well as the disk, covered with large punctures, which are distant; the anterior tibiæ rugose above; wings very dark fuscous, having a brilliant violet iridescence; the abdomen above has a metallic reflection; beneath, the pollen-brush black.

Male. Length 5 lines.—Black, the face covered with pale pubescence, towards the anterior margin of the clypeus it is white, the cheeks fringed with long white hair; the antennæ capitate, nigro-piceous beneath. Thorax, the metathorax at the sides has some cinereous pubescence; wings dark fuscous, and having a violet reflection, towards their base subhyaline; the anterior legs testaceous, the apex of the femora and the tibiæ above rufo-fuscous, their tarsi dilated and having beneath a thick fringe of white pubescence, its border narrowly black; the first joint of the tarsi has a fringe of brown pubescence in front; the coxæ armed with stout teeth; the intermediate and posterior tarsi beneath covered with reddish-brown pubescence; the intermediate tarsi elongate, the posterior pair stout, particularly the basal joint, the tibiæ slightly curved.

Hab. United States. (Coll. E. Doubleday, Esq.)

140. MEGACHILE POLLICARIS.

Megachile pollicaris, *Say, Bost. Journ. Nat. Hist.* i. 406 (1837).

Hab. North America.

141. Megachile pugnata. B.M.

Megachile pugnatus, *Say*, *Bost. Journ. Nat. Hist.* i. 408 (1837).
Hab. North America.

142. Megachile pruina, n. s.

Female. Length 6 lines.—Black, the face on each side covered with snow-white pubescence; the three basal joints of the antennæ black, the rest of the joints testaceous beneath; the sides of the thorax covered with snow-white pubescence, a small tuft of the same colour behind the tegulæ; wings subhyaline, their apical margins fuscous, nervures black; the legs have a thin snow-white pubescence, that on the tarsi beneath dark brown; the claws ferruginous, their tips black; the calcaria pale testaceous. Abdomen obconic, the four basal segments have a deep transverse depression; the sides of the basal segment and the margins of all the segments laterally fringed with white pubescence; the apical segment covered with short hoary pile; the whole abdomen has a scattered short black pubescence; beneath, the pollen-brush white.
Hab. United States. (Coll. F. Smith.)

143. Megachile lanuginosa, n. s. B.M.

Female. Length 4½ lines.—Black, on each side of the face is a little snow-white pubescence, on the upper part of the head it is very sparing and black, as it is also on the disk of the thorax; on the cheeks, sides of the metathorax, prothorax and basal segment of the abdomen it is white, and has a downy appearance; the rest of the abdominal segments have a lateral short white marginal fringe; wings subhyaline, their apical margins faintly clouded; the brush on the abdomen beneath pale yellowish white.

Male. Length 4 lines.—Head wider than the thorax, anterior legs simple, the claw-joints ferruginous, the margin of the apical segment jagged irregularly. The specimen in bad condition.
Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday.)

144. Megachile bidentata, n. s. B.M.

Male. Length 5 lines.—Black, the face thickly covered with a bright pale ochraceous pubescence, that on the thorax is of a similar colour; the wings subhyaline, slightly clouded at their apical margins, the nervures ferruginous; the anterior legs have their coxæ unarmed and their tarsi simple; the femora beneath fringed with long pale pubescence, that on the tarsi beneath is pale fulvous. Abdomen, the apical margins of the segments have a fascia of pale pubescence, and the fifth and sixth densely

covered with a short pubescence of the same colour; the margin of the sixth segment armed with two stout teeth.

Obs. This species was received in company with *M. acuta*, of which it is probably the male.

Hab. Mexico.

145. MEGACHILE SCROBICULATA, n. s.

Male. Length 4½ lines.—Black, the clypeus covered with white pubescence, above which it is griseous and very sparing on the vertex; the mandibles have a short white fringe beneath, at their base is a stout spine, the cheeks fringed with white; the pubescence on the thorax griseous, very sparing on the disk; the anterior legs have their tibiæ pale testaceous in front, their femora slightly so, their tarsi dilated, the first joint at its apex produced into a projecting lobe, rounded at its apex; this lobe is grooved or hollowed out in front; the tarsi beneath clothed with pale yellow hairs, the coxæ armed with long spines; the intermediate and posterior tarsi rufo-testaceous; the wings subhyaline, their nervures ferruginous; the apical margins of the segments have narrow white marginal fasciæ, the apical segment slightly notched in the middle and subserrate on each side.

Hab. North America; Mount Pleasant, Ohio.

146. MEGACHILE PARALLELA, n. s.

Male. Length 5½ lines.—Black, the clypeus and cheeks densely covered with white pubescence, on the upper part of the face and on the disk of the thorax it is slightly ochraceous; on the sides, beneath, and on the legs it is white, the anterior femora are thickly fringed; wings fusco-hyaline, their nervures black; the margins of all the segments and the sides of the basal one fringed with white pubescence; the base deeply emarginate; the margin of the apical segment has a central rounded incision, forming two incurving teeth; beneath, the margin of the venter has on each side two short teeth, directed inwards, between the inner ones a raised prominence.

Obs. This species is distinguished by its broad parallel form, the abdomen, head and thorax being of the same width.

Hab. Georgia. (Coll. F. Smith.)

147. MEGACHILE MELANOPHÆA, n. s. B.M.

Female. Length 6 lines.—Black, the face, thorax above and on the sides, and the two basal segments of the abdomen covered with ashy-grey pubescence; in recent specimens it has

an ochraceous hue; the legs and apical segments of the abdomen have a covering of black pubescence; the tarsi beneath fulvous; the wings hyaline, faintly clouded at their apical margins. The brush on the abdomen beneath is of a blackish brown.

Male.—Has the general appearance of the female, its pubescence is longer, that on the face being very dense and of a pale yellow colour; the apical joint of the antennæ dilated and compressed: the anterior legs pale testaceous; the apex of the femora and the tibiæ above black, the tarsi dilated and fringed beneath with pale hairs; the intermediate tarsi have a yellow pubescence above, and are, as well as the posterior pair, fulvous beneath, their claws ferruginous; the apical segment deeply notched, and on each side denticulate; beneath the abdomen on the ventral segment are two obtuse spines, and a little before them a central acute one.

Hab. Nova Scotia (Lieut. Redman). Hudson's Bay (G. Barnston, Esq.). North America (E. Doubleday, Esq.)

148. MEGACHILE ACUTA, n. s. B.M

Female. Length 6 lines.—Black, the entire pubescence above of a pale yellow, in some specimens fading to grey; the legs have a short pubescence of the same colour, beneath the tarsi it is fulvous; wings hyaline, faintly clouded at their apical margins. Abdomen gradually tapering from the base to the apex; the base deeply emarginate, the second, third and fourth segments have a transverse arched depression; beneath, the pollen-brush bright fulvous.

Hab. North America; Trenton Falls; New York (E. Doubleday, Esq.); Mexico.

149. MEGACHILE VIDUA, n. s. B.M.

Megachile maritima, *Kirby*, *Faun. Boreal. Amer.* p. 270. 1, exclus. synon.?

Female. Length 6 lines.—Black, the face covered with pale ochraceous pubescence, brightest towards the margin of the clypeus, on the vertex and disk of the thorax it is dark fuscous, on the sides of the thorax, beneath, on the legs above and at the sides of the basal segment of the abdomen it is of a very pale yellow, being nearly white at the sides of the metathorax, and short and sparing on the legs; wings subhyaline, the apical margins faintly clouded; the tarsi fulvous beneath, on the anterior and intermediate pairs it is of a bright golden-yellow above, the

claws ferruginous. Abdomen short, broad and slightly convex above, the segments have narrow pale marginal fasciæ, usually much interrupted on the three basal segments; beneath, the pollen-brush is of a golden-yellow.

Obs. This insect is probably the female of *M. frigida*, having been captured in various and the same localities as that species.

Hab. North America (E. Doubleday, Esq.); Nova Scotia (Coll. Lieut. Redman).

150. MEGACHILE FRIGIDA, n. s. B.M.

Male. Length 5–6 lines.—Black, the face densely clothed with bright yellow pubescence, the apical joint dilated and compressed; the disk of the thorax thinly clothed with ochraceous pubescence, that on the sides and also on the sides of the basal segments of the abdomen is pale ochraceous; the anterior legs pale testaceous, the apex of the femora and the tibiæ above, except its apex, rufo-fuscous; the tarsi broadly dilated, and having beneath a dense fringe of yellowish-white pubescence; the first joint of the tarsi has above a narrow fuscous fringe; the femora beneath have a long loose fringe of nearly white pubescence; the intermediate tarsi covered with pale yellow pubescence, and having a long loose fringe behind of the same colour; the posterior tibiæ curved. The apical segments of the abdomen curved beneath, the margin of the apical segment serrated and deeply notched in the middle.

Obs. This species very closely resembles the European one, *M. maritima*, from which it differs in wanting the black spot on the second joint of the anterior tarsi beneath, and in not having the mandibles yellow on their inferior margins; the posterior femora are also much less thickened and the posterior tarsi considerably longer.

Hab. United States (Coll. E. Doubleday); Nova Scotia (Coll. Lieut. Redman); Arctic America (Coll. Sir John Richardson); Canada (G. Barnston, Esq.).

151. MEGACHILE BUCEPHALA, n. s. B.M.

Female. Length 6½ lines.—Black and elongate, head quadrate, the face having on each side a little griseous pubescence; the anterior margin of the clypeus produced in the middle, and having on each side a short blunt tooth; the mandibles very stout, roughly sculptured above, and deeply channeled towards their apex, which is armed with two teeth, the apical one long

and acute. Thorax, the disk thinly sprinkled with fuscous pubescence, that on its sides is griseous; the wings fuscous towards their anterior margins, the nervures dark fuscous; the legs have a thin cinereous pubescence, that on the tarsi is bright fulvous-yellow. Abdomen, the sides of the basal segment and apical margins of all the segments fringed with white pubescence, usually more or less interrupted, particularly those on the basal segments; beneath, the pollen-brush pale yellow.

Hab. United States. (Coll. E. Doubleday.)

EXPLANATION OF THE PLATES.

PLATE I.

The letters indicate the same parts in all the figures; they are as follows:—*a*. the mentum; *b*. the labium; *c*. the labial palpi; *d*. the paraglossæ; *e*. the maxilla; *f*. the lobe of the maxilla; *g*. the maxillary palpi.

Fig.
1. Tongue of *Colletes*.
2. Maxilla of *Colletes*.
3. Wing of *Colletes*.
4. Tongue of *Paracolletes*.
5. Maxilla of *Paracolletes*.
6. Wing of *Paracolletes*.
7. Tongue of *Ptiloglossa*.
8. Maxilla of *Ptiloglossa*.
9. Wing of *Ptiloglossa*.
10. Labrum of *Ptiloglossa*.
11. Tongue of *Lamprocolletes*.
12. Posterior tibia of *Lamprocolletes*.
13. Maxilla of *Lamprocolletes*.
14. Apical segment of abdomen of *Lamprocolletes*.
15. Spines or calcariæ of tibiæ of *Lamprocolletes*.
16. Tongue of *Leioproctus*.
17. Maxilla of *Leioproctus*.
18. Wing of *Leioproctus*.
19. Tongue of *Dasycolletes*.
20. Maxilla of *Dasycolletes*.
21. Wing of *Prosopis*.—Division 1.
22. Wing of *Prosopis*.—Div. 2.
23. Wing of *Prosopis*.—Div. 3.

PLATE II.

1. Tongue of *Euryglossa*.
2. Maxilla of *Euryglossa*.
3. Labrum of *Euryglossa*.
4. Wing of *Euryglossa*.
5. Tongue of *Hyleoides*.
6. Maxilla of *Hyleoides*.
7. Anterior leg of *Hyleoides*.
8. Wing of *Hyleoides*.
9. Tongue of *Meroglossa*.
10. Maxilla of *Meroglossa*.
11. Antenna of *Meroglossa*.
12. Wing of *Meroglossa*.
13. Maxilla of *Halictus*.
14. Tongue of *Halictus*.
15. Wing of *Halictus*.
16. Labrum of ♂ of *Halictus*.
17. Labrum of ♀ of *Halictus*.
18. Tongue of *Temnosoma*.
19. Maxilla of *Temnosoma*.
20. Wing of *Temnosoma*.

PLATE III.

Fig.
1. Tongue of *Parasphecodes*.
2. Maxilla of *Parasphecodes*.
3. Wing of *Parasphecodes*.
4. Labrum of *Parasphecodes*.
5. Tongue of *Sphecodes*.
6. Maxilla of *Sphecodes*.
7. Wing of *Sphecodes*.
8. Tongue of *Oxystoglossa*.
9. Maxilla of *Oxystoglossa*.
10. Wing of *Augochlora*.
11. Maxilla of *Megalopta*.
12. Tongue of *Megalopta*.
13. Labrum of *Megalopta*.
14. Antenna of *Megalopta*.
15. Wing of *Megalopta*.

PLATE IV.

1. Tongue of *Agapostemon*.
2. Maxilla of *Agapostemon*.
3. Labrum of ♂ of *Agapostemon*.
4. Labrum of ♀ of *Agapostemon*.
5. Tongue of *Nomia*.
6. Wing of *Nomia*.
7. Tongue of *Anthoglossa*.
8. Maxilla of *Anthoglossa*.
9. Wing of *Anthoglossa*.
10. Wing of *Cilissa*.
11. Mandible of *Callomelitta*.
12. Tongue of *Callomelitta*.
13. Wing of *Callomelitta*.
14. Maxilla of *Callomelitta*.
15. Antenna of *Callomelitta*.
16. Tongue of *Scrapter*.
17. Maxilla of *Scrapter*.
18. Wing of *Scrapter*.
19. Tongue of *Megacilissa*.
20. Maxilla of *Megacilissa*.
21. Wing of *Megacilissa*.

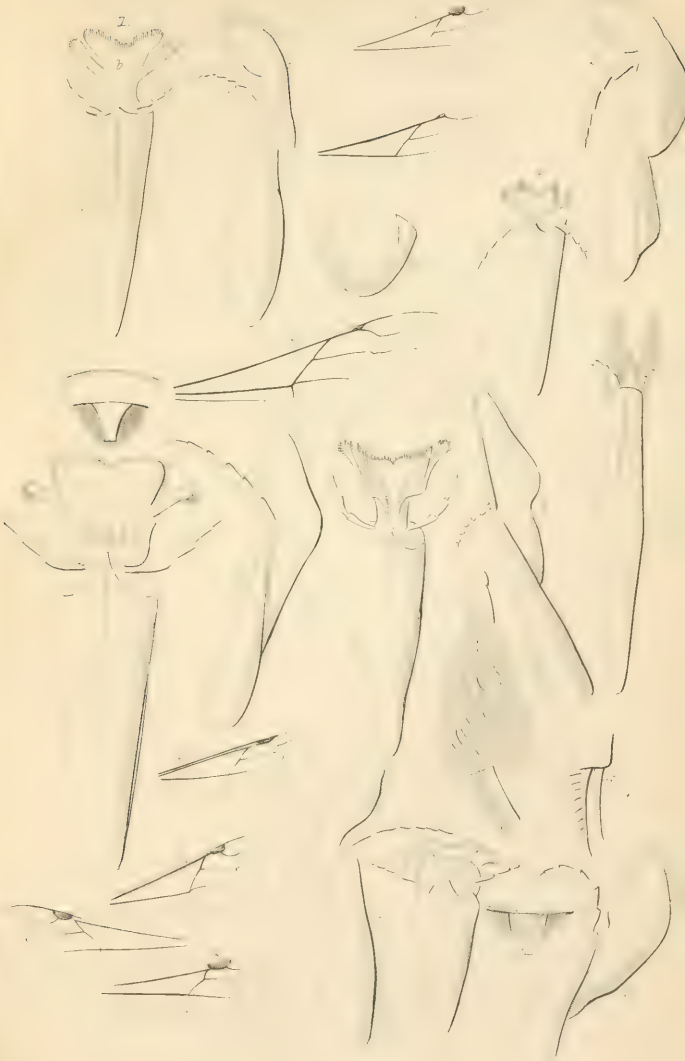
PLATE V.

1. Tongue of *Andrena labialis*.
2. Maxilla of *Andrena labialis*.
3. Wing of *Andrena labialis*.
4. Tongue of *Macropis*.
5. Maxilla of *Macropis*.
6. Wing of *Macropis*.
7. Tongue of *Panurgus*.
8. Maxilla of *Panurgus*.
9. Wing of *Panurgus*.
10. Tongue of *Perdita*.
11. Maxilla of *Perdita*.
12. Labrum of *Perdita*.
13. Mandible of *Perdita*.
14. Wing of *Perdita*.
15. Tongue of *Calliopsis*.
16. Maxilla of *Calliopsis*.
17. Antenna of *Calliopsis*.
18. Labrum of *Calliopsis*.
19. Wing of *Calliopsis*.
20. Tongue of *Macrotera*.
21. Maxillary palpus of *Macrotera*.
22. Wing of *Macrotera*.

PLATE VI.

Fig.
1. Tongue of *Rophites 5-spinosus.*
2. Maxilla of *Rophites 5-spinosus.*
3. Wing of *Rophites 5-spinosus.*
4. Tongue of *Anthocopa papaveris.*
5. Maxilla of *Anthocopa papaveris.*
6. Wing of *Anthocopa papaveris.*
7. Tongue of *Systropha spiralis.*
8. Maxilla of *Systropha spiralis.*
9. Antennæ of male of *Systropha spiralis.*
10. Wing of *Systropha spiralis.*

Fig.
11. Tongue of *Ptilothrix plumosus.*
12. Maxilla of *Ptilothrix plumosus.*
13. Labrum of *Ptilothrix plumosus.*
14. Wing of *Ptilothrix plumosus.*
15. Maxillary palpus of *Lithurgus cornutus.*
16. Labial palpus of *Lithurgus cornutus.*
17. Tongue of *Megachile maritima.*
18. Maxilla of *Megachile maritima.*
19. Wing of *Megachile maritima.*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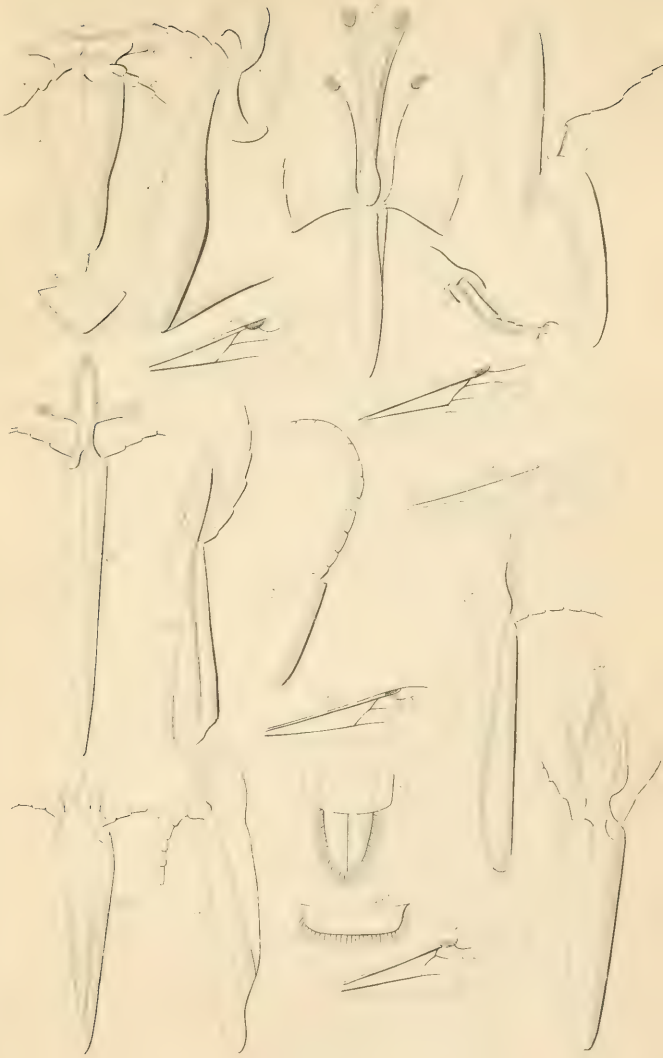

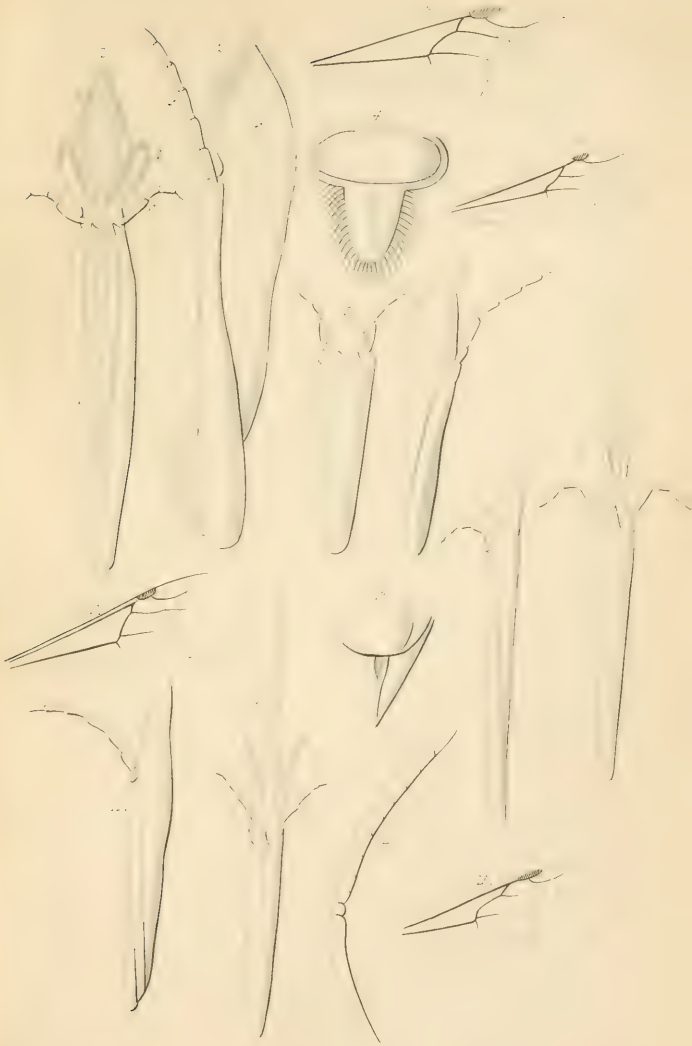

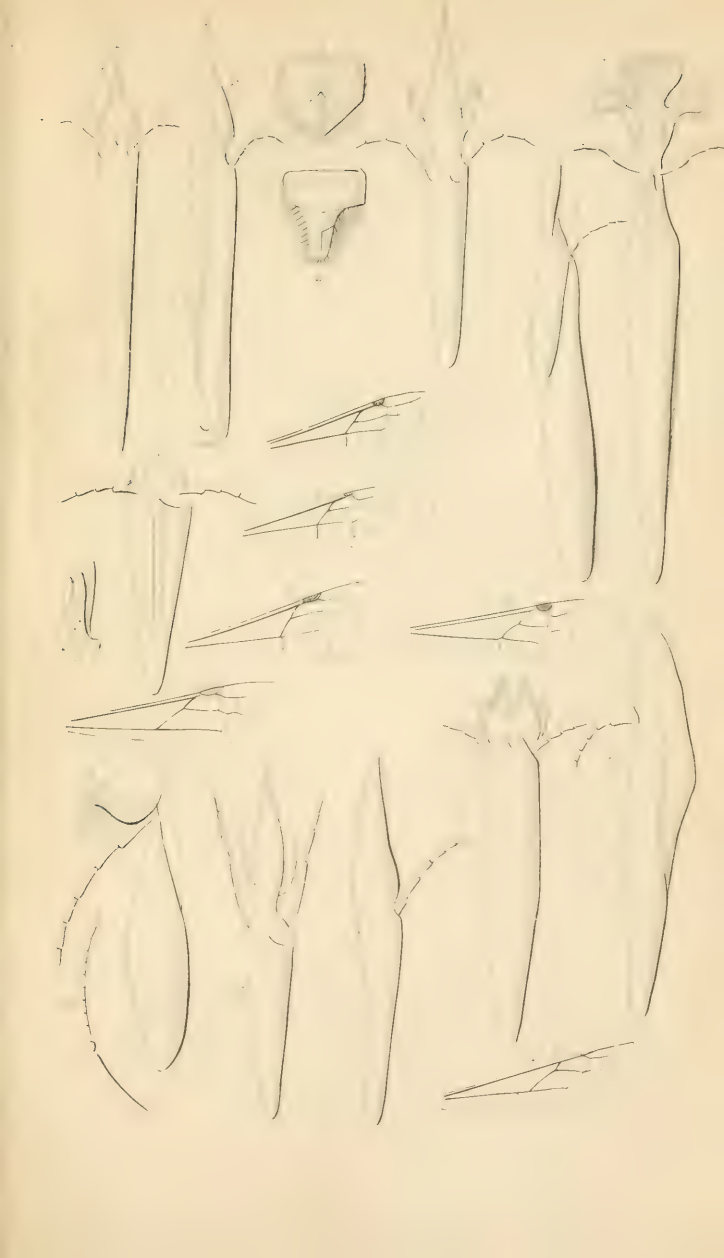

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